



# ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276

RENEE CIPRIANO, DIRECTOR

USEPA

217/524-3300

June 28, 2002

CERTIFIED MAIL

7001 2510 0002 3280 3886

7001 2510 0002 3280 3893

**OPERATOR**

Fluorecycle, Inc.  
27780 W. Concrete Drive, Unit A  
Ingleside, Illinois 60041

**OWNER**

MGDSF Partnership  
2528 South 27<sup>th</sup> Ave.  
Broadview, Illinois 60155

Re: 0974455001 -- Lake County  
Fluorecycle, Inc.  
ILR000049833  
RCRA Log 168  
Administrative Record File

Dear Messrs. Worth and Murphy:

Enclosed is a RCRA Hazardous Waste Management Part B permit and Illinois EPA's responses to significant comments on the draft permit. The permit is based on the administrative record contained in the Illinois EPA's files. The contents of the administrative record are described in 35 Illinois Administrative Code (I.A.C.) Section 705.211. Read these documents carefully. Failure to meet any portion of the permit could result in civil and/or criminal penalties.

Within 35 days after the notification of a final permit decision, the permittee may petition the Illinois Pollution Control Board to contest the issuance of the permit. The petition shall include a statement of the reasons supporting a review, including demonstration that any issues raised in the petition, were previously raised during the public comment period. In all other respects the petition shall be in accordance with the requirements for permit appeals as set forth in 35 I.A.C. Part 105. Nothing in this paragraph is intended to restrict appeal rights under Section 40(b) of the Environmental Protection Act (35 I.A.C. 705.212(a)).

Petitions for review of the USEPA decision must be submitted within 30 days after service of notice of the final USEPA permit decision. Any person who filed comments on the draft permit or participated in the public hearing may petition the Environmental Appeals Board to review any condition of the permit decision. Any person who failed to file comments or failed to participate in the public hearing on the draft permit may petition the Environmental Appeals Board to review only to the extent of the changes from the draft to the final permit decision. The procedures for permit appeals on the USEPA portion of the permit are found in 40 CFR 124.19.

GEORGE H. RYAN, GOVERNOR

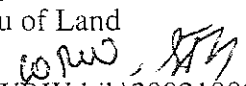
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If you have any comments or questions regarding the above, please contact Rob Watson, P.E. at 217/524-3265.

Sincerely,



Joyce L. Munie, P.E.  
Manager, Permit Section  
Bureau of Land

  
JLM:WRW:bjh\20021902s.doc

Attachments: Response to Comments  
Hazardous Waste Management Permit

cc: USEPA Region V  
ESI- Nick Malone

**0974455001 -- Lake County  
Fluorecycle  
ILR 000 049 833  
Log No: B-168**

## **Responses to Comments on the Draft Permit**

### **Comments on Draft Permit**

The following two submittals were considered comments on the draft permit.

- **May 3, 2001** - ESI, on behalf of Fluorecycle, provided comments on the draft RCRA permit.
- **November 21, 2001** - ESI, on behalf of Fluorecycle, provided items required by Section L – Compliance Schedule of the draft RCRA permit.

Technically, the November 21, 2002 submittal was provided after the comment period ended. However, it included items required in the compliance schedule for the draft permit. These items were considered as additional information to the permit application. Their inclusion in the application necessitated changing the conditions in the permit. Thus, the information in the November 21, 2001 submittal, and the changes to the permit that resulted from this information, are addressed in these responses to comments.

### **Format of Responses to Comments**

The format of the responses to the comments on the draft permit will begin by addressing the general issues raised in the May 3, 2001 letter. After that, the responses will address the comments (proposed revisions) for each condition in the permit. In addition, these responses will indicate when a new condition was added to the permit in response to the information provided in the above two letters.

## **Comments**

### **Comment**

“Off-loading” of wastes does not constitute receipt of the waste. For the purposes of this Permit Application the term “receive” and its various tenses and uses shall be defined as: to take into possession and accept for storage or potential storage in the RCRA Storage Area.

**Response**

The Illinois EPA disagrees with Fluorecycle's comment. On the contrary, Illinois EPA considers waste to be "received" when it crosses the property line. In the case of Fluorecycle, the receiving process continues thru the unloading of the wastes at the common dock area. Page C-5a of the permit application even refers to the loading dock where the incoming waste inspection procedures will take place as the "common loading/receiving area."

In order to clarify the term "receive," and how it applies to waste receipt at the facility, Illinois EPA added Condition I.F.7 to the permit to clarify this issue. Note: the term "waste" applies to both hazardous and nonhazardous wastes.

**Special Condition I.F.7**

*All waste is considered to be "received" at the facility when it crosses the property line. The receiving process continues thru the unloading of the wastes at the common loading dock area where the incoming waste inspection procedures will take place and the facility determines whether to accept the waste.*

.....  
**Comment**

The previous application and review determined that mercury-containing lamps or lamps shipped mixed with mercury-containing lamps (because of potential contamination or the inability to be separated) be received for storage or potential storage in the RCRA storage area. Non-mercury-containing lamps (e.g. incandescent lamps) shipped to this facility will not be received for storage or potential storage in the RCRA storage area.

The proposed definition of "Mercury Containing Lamp" in Attachment A of the May 3, 2001 submittal reads:

**Mercury-containing Lamp:**

For the purposes of this Permit Application the term "**mercury-containing lamp(s)**" shall be defined as: **Fluorescent, High-Intensity Discharge, or other mercury containing lamps, or non-mercury containing lamps that have been packaged or shipped mixed with mercury-containing lamps.** Incandescent or non-mercury-containing lamps shipped separately or not mixed with mercury-containing lamps shall not be defined as mercury-containing lamps.

**Response**

The Illinois EPA disagrees with the claims made in Fluorecycle's comment and the proposed definition of Mercury-containing Lamp. Therefore, Condition I.B.1 was not changed to include the definition of mercury containing lamp proposed in ESI's comments on the draft permit.

The previous application and review did not determine that lamps shipped mixed with mercury-containing lamps (because of potential contamination or the inability to be separated) could be received for storage or potential storage in the RCRA storage area. In fact, the review found just the opposite and therefore the permit is conditioned accordingly. The permit application did not adequately identify how wastes other than mercury containing lamps would be managed at the

facility. Furthermore, the application never proposed that non-mercury containing lamps be received at the facility because of potential contamination or the inability to separate this waste from mercury containing lamps.

The type of potential contamination was not defined by Fluorecycle and neither the comment, nor the permit application, described how contaminated lamps would be managed. In particular, the procedures in the waste analysis plan (WAP) do not address this issue. The WAP procedures are very general, for a commercial facility, primarily because the facility proposed to only receive one type of waste – mercury containing lamps. Procedures for determining compatibility, definitions of what is, and what is not, compatible, and procedures for handling the waste accordingly, are simply not part of the application, or the comments on the draft permit.

.....

**The rest of the comments & responses to comments pertain to revisions to individual permit conditions.**

.....

**Comment**

Revise the first paragraph under **Description of Facility** to indicate that the lamps are considered Universal Waste and may be hazardous waste (D009) due to the mercury in them.

**Illinois EPA Response**

Ok to revise condition as indicated. The proposed change clarifies the intent of the paragraph and the description of wastes that can be received at Fluorecycle.

.....

**New sentence in 3<sup>rd</sup> paragraph under Description of Facility**

Figure B18A, the arrangement of containers in the container storage area, was provided in the November 21, 2001 submittal. Figure B18A was incorporated into the permit as Figure 3 in order to clearly identify the permitted storage arrangement and aisle spacing in the container storage area. The 3<sup>rd</sup> paragraph in Description of Facility was revised to refer to this new Figure 3.

.....

**Comment**

Revise the 3<sup>rd</sup> paragraph under **Description of Facility** to indicate the permittee is prohibited from conducting hazardous waste storage activities in areas that are not specifically identified in the approved permit application or this permit.

**Illinois EPA Response**

No revision to this condition. The proposed change limits the scope of the condition to the hazardous waste stored in the container storage area. The permit also covers activities other than storage such as the receipt of waste and unloading operations. The purpose of this condition is to state that waste management activities not specified in the application or permit are prohibited. This prohibition is not limited to the hazardous waste in the storage area.

.....

**Comment**

Revise **Condition I.A** to permit the receipt of whole lamps in steel, vinyl, or other containers designed for shipment of lamps.

**Illinois EPA Response**

No revision to this condition. The condition was based on the information provided in Section D of the original permit application. The comments on the draft permit did not provide any basis for expanding the types of containers used to hold wastes that are shipped to the facility.

.....

**Comment**

Revise **Condition I.B.1** as indicated below:

The permittee is prohibited from receiving or storing wastes in the RCRA Storage Area that are not mercury-containing lamps ~~identified as hazardous waste (D009) and~~ or not mixed with mercury-containing lamps as defined in the Universal Waste Regulations at 35 Il. Adm. Code 733.106. Mercury-containing lamps include, but are not limited to, fluorescent lamps, and high intensity discharge (HID) lamps, or lamps mixed with mercury-containing lamps (e.g. lamps). Incandescent light bulbs, not mixed with mercury-containing lamps (a nonhazardous waste), ballasts, batteries, thermostats, ~~compatible~~ and other wastes that are not specifically identified in the application, or other types of waste shall not be received at the facility for placement or intended placement ~~or placed~~ in the RCRA storage area. This RCRA permit may need to be modified in accordance with 35 Il. Adm. Code 703 should the permittee wish to receive and store other types of waste in the future.

**Illinois EPA Response**

Condition I.B.1 will not be revised as proposed by Fluorecycle. The majority of the proposed changes to this condition are focused on limiting the condition to the RCRA storage area and allowing the facility to receive other wastes that are mixed with mercury-containing lamps.

These proposed changes are not acceptable. The permit applies to the entire site; that is why this condition limits the types of wastes that can be received, not just what can be placed in the RCRA storage area. In addition, the permit application and the comments on the draft permit did not adequately describe how other types of wastes would be managed at the facility. Performing other waste management activities at the facility could result in other nonhazardous permit requirements being applicable to the facility. In addition, the local siting approval may not be valid for these other activities.

The Illinois EPA does agree that the phrase limiting the type of waste received to wastes that are “hazardous due to mercury (D009)” should be removed from the condition. In addition, since the Universal Waste regulations at 35 IAC 733 may change over time, Illinois EPA has decided to quote the definition of “mercury-containing lamps” from 733.109 in the condition instead of referring to this regulation.

**Revised Condition I.B.1**

*The permittee is prohibited from receiving or storing wastes that are not mercury-containing lamps. "Mercury-containing lamp" means an electric lamp into which mercury is purposely introduced by the manufacturer for the operation of the lamp. Mercury-containing lamps include, but are not limited to, fluorescent lamps and high-intensity discharge lamps (e.g. lamps). Incandescent light bulbs, (a nonhazardous waste), ballasts, batteries, thermostats, compatible wastes that are not specifically identified in the application, or other types of waste shall not be received at the facility or placed in the RCRA storage area. This RCRA permit may need to be modified in accordance with 35 Il. Adm. Code 703 should the permittee wish to receive and store other types of waste in the future.*

.....

**Comment**

Revise **Condition I.B.3** to prohibit the receipt or storage of ignitable or reactive waste lamps (emphasis added) at the Fluorecycle facility.

**Illinois EPA Response**

No revision to this condition. This condition is intended to be general in nature and applies to all wastes received at the site. The comments on the draft permit did not provide any basis for limiting this condition to lamps.

.....

**New Condition I.B.5**

The cost estimate provided with the November 21, 2001 submittal did not include the cost for processing drums of crushed lamps. Per discussions with Fluorecycle, a pallet will hold approximately 700-800 whole lamps, while a pallet of 4 drums can hold approximately 2,500 crushed lamps. The cost for processing crushed lamps is greater than it is for processing whole lamps. Therefore, until the permittee can demonstrate that the cost estimate & financial assurance is adequate to cover the cost of processing the sixteen (16) 55-gallon drums of crushed lamps, the permittee should be prohibited from receiving crushed lamps. This new special condition addresses this issue.

.....

**Comment**

The permittee proposed revising **Condition I.C.1** to increase the maximum storage volume in the container storage area. The May 3, 2001 submittal proposed to increase the maximum storage volume from 2,880 to 7,712 cubic feet. Figure B18A provided with the November 21, 2001 submittal indicated the maximum storage volume was 6,309 cubic feet.

**Illinois EPA Response**

Neither submittal included adequate justification for the proposed volume increases. Therefore, the information provided on Figures B18A & B18B in the November 21, 2001 submittal was used to calculate a maximum storage volume. This is the new maximum storage volume identified in Condition I.C.1.

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**Comment**

Revise **Condition I.C.2** to allow storage of containers as indicated on Figure B18A.

**Illinois EPA Response**

Condition I.C.2 in the draft permit was deleted. The container storage arrangement indicated on the Figure B18A provided on November 21, 2001, together with the conditions in the permit, is now adequate to meet the regulations. Condition I.F.3 already states containers shall only be placed in the permitted storage area, therefore, the prohibitions in old Condition I.C.2 are no longer required.

**Condition I.C.3** in the draft permit was renumbered as Condition I.C.2 in the final permit.

.....

**Comment**

Revise **Condition I.E.1** to delete the reference to the “hazardous” waste stored in the containers.

**Illinois EPA Response**

Condition I.E.1 was revised as requested. The proposed change clarifies the intent of the condition. Containers used to store waste at the site must be compatible with all wastes placed in them. As noted earlier, the site will be permitted to receive both hazardous and nonhazardous mercury-containing lamps.

.....

**Comment**

Revise **Condition I.F.3** to delete the prohibition that containers can only be placed on the storage racks.

**Illinois EPA Response**

The condition was revised as requested. Containers can now be stored in accordance with the arrangement specified on Figure B18A of the application (Figure 3 in the permit).

.....

**Comment**

Revise **Condition I.F.4** to indicate containers could not be located in the common loading dock area for more than one work shift.

**Illinois EPA Response**

This condition already limits the time containers can be located in the common loading dock area to less than 8 hours. No justification for the proposed revision was provided; therefore, no change was made.

.....



**New Condition I.F.4**

This new condition was added in order to specify that containers should only be stored in accordance with the storage arrangement identified on Figure 3 of this permit. It also specifies that containers stored on the floor shall not be stacked more than 6.5 feet high. This height limitation was taken directly from Figures B18A & B18B.

.....

**New Condition I.F.5**

This new condition was added in order to specify that containers that are stored on the floor (e.g. not stored on the storage racks) should be removed from the container storage area within seven days of the date they were placed there. This is necessary because the rows of pallets of containers stored on the floor are next to the storage racks. Thus there is no inspection aisle between these rows. Requiring the containers on the floor to be removed each week insures that the inspection requirements of 35 IAC 724.274 can be met.

.....

As a result of the addition of these two new conditions, **Condition I.F.4** in the draft permit was renumbered as Condition I.F.6 in the final permit.

.....

**New Condition I.F.7**

See the response / discussion to the first comment above.

.....

**New Condition I.H.3**

The response for this new condition is included with the discussion on the revision to Condition I.I.1 below.

.....

**Comment**

Revise **Condition I.I.1** to indicate that the Contingency Plan will be implemented anytime 360 or more lamps are accidentally broken in a single incident.

**Illinois EPA Response**

The justification for increasing the number of broken lamps that would trigger implementation of the Contingency Plan to 360 was reviewed and found to be acceptable. Therefore, the revision will be made as requested. The requirement to implement the Contingency Plan if ½ of a 55-gallon drum of crushed lamps is spilled was taken directly from the revised Contingency Plan submitted on November 21, 2001.

However, in the course of the review it was noted that the underlying basis for implementing the Contingency Plan is the concentration of mercury vapor released from the lamps when they are broken. Therefore, the condition was also revised to state the contingency plan shall also be implemented whenever the acceptable instantaneous, or average, mercury vapor exposure limits are exceeded. The time weighted average and instantaneous concentrations for mercury vapor in

Condition I.I.1 were obtained from the CD version of the NIOSH Pocket Guide to Chemical Hazards (August 2001).

The application did not fully address the issue of monitoring the air in the storage/processing area for the instantaneous and time weighted average concentrations of mercury vapor. Therefore, a **new Condition I.H.3** added to require the permittee to monitor both the continuous and instantaneous mercury vapor concentration in the area where the lamps are managed.

Finally, the condition in Attachment A, General Inspection Schedule for the container storage area that required inspecting the mercury concentration in the ambient was deleted because the new condition I.H.3 and revised condition I.I.1 now address this issue.

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**Comment**

Revise **Condition I.I.3** to delete the wording "... for use by emergency response personnel."

**Illinois EPA Response**

The condition was revised as requested.

.....

**Comment**

**Condition I.L**, Compliance Schedule: The due date for the compliance schedule items was revised to August 2, 2002.

.....

**Comment**

Include the information provided on November 21, 2001 into the permit application, and delete the requirements to submit this information from the permit.

**Illinois EPA Response**

Most of the information required by the following compliance schedule items in Condition I.L was provided in the November 21, 2001 submittal. Therefore, the following conditions were deleted from the final permit: I.L.1, I.L.2.b, I.L.3, I.L.4, I.L.5.a, I.L.5.b, I.L.9, and I.L.10.

However, not all of the information provided adequately addressed the requirements in Condition I.L. Therefore, the outstanding items are repeated in a renumbered Condition I.L.

.....

**Comment**

Revise the title for Attachment A to read "Daily Operation."

**Illinois EPA Response**

The title was not revised. No justification for the proposed change was provided. Attachment A is the general inspection schedule, and includes more than just the daily inspection items.

.....

**Comment**

Revise the inspection item for aisle space in Attachment A, General Inspection Schedule from 6 feet to 30 inches.

**Illinois EPA Response**

The item was revised as indicated. The revision more accurately reflects the new container storage arrangement indicated in Figure B18A of the application.

.....

**Comment**

Revise the inspection item for timely removal of containers from the common loading dock area to read "one work shift", and change the inspection frequency from 3 times per day to "once per shift."

**Illinois EPA Response**

No justification for the proposed change was provided. Therefore, the inspection item was not revised as requested. However, the inspection frequency was changed to read "once every 8 hours that containers are located in the area." This change is intended to clarify the intent of the condition, and not require the area to be inspected if in fact no containers are located in it.

.....

**Comment**

Revise the inspection item for Decontamination Equipment in Attachment A, Inspection Schedule that requires the decontamination equipment to be held in a steel drum.

**Illinois EPA Response**

The condition has been revised to delete the requirement that the equipment be held in a "steel" drum.

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**END OF RESPONSES TO COMMENTS**



# ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276

RENEE CIPRIANO, DIRECTOR

## ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

### HAZARDOUS WASTE MANAGEMENT RCRA PART B PERMIT

IEPA # 0974455001 -- Lake County  
USEPA # ILR000049833  
Fluorecycle, Inc.  
Permit Log No. B-168  
RCRA Administrative Record File

Issue Date: June 28, 2002  
Effective Date: August 2, 2002  
Expiration Date: June 28, 2012

#### OPERATOR

Fluorecycle, Inc.  
27780 W. Concrete Drive, Unit A  
Ingleside, Illinois 60041

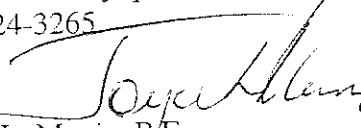
#### OWNER

MGDSF Partnership  
2528 South 27<sup>th</sup> Ave.  
Broadview, Illinois 60155

A Part B permit is hereby granted pursuant to the Resource Conservation and Recovery Act (RCRA), Illinois Environmental Protection Act, and Title 35 Illinois Administrative Code (I.A.C.) parts 702, 703, 705, and 720 through 729 to Fluorecycle to construct, maintain and operate a waste management facility involved in the storage of hazardous waste in containers. Fluorecycle, Inc. is located in Lakemoor Illinois. Although the facility is physically located in Lakemoor, the address for the facility is 27780 W. Concrete Drive, Ingleside, Illinois.

This permit consists of the conditions contained herein (including those in any attachments and appendices) and applicable regulations contained in the Illinois Environmental Protection Act and Title 35 I.A.C. Parts 702, 703, 705 and 720 through 729 and 733 in effect on the effective date of this permit. The Environmental Protection Act (Ill. Rev. Stat., Chapter 111 1/2, Section 1039) grants the Illinois Environmental Protection Agency the authority to impose conditions on permits that are issued. This permit contains 46 pages including Attachments A through E.

If you have any questions regarding this permit, please contact Rob Watson, P.E. at 217/524-3265

  
Joyce L. Mumie, P.E.  
Manager, Permit Section  
Bureau of Land

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GEORGE H. RYAN, GOVERNOR

**RCRA Hazardous Waste Management Permit  
Fluorecycle  
0974455001 -- Lake County  
ILR000049833  
Log No. B-168**

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Attachment "C" – Closure Cost Estimate

Attachment "D" - Reporting and Notification Requirements

Attachment "E" - Identification of the Approved Permit Application

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## DESCRIPTION OF FACILITY

Fluorecycle is a hazardous waste storage facility located in Lakemoor, Illinois. The facility processes used fluorescent and high intensity discharge (HID) lamps (e.g. lamps) and reclaims / recovers the mercury, glass and metals in these wastes. The lamps are considered Universal Waste, and may be hazardous waste (D009) due to the mercury in them.

This RCRA Part B permit is for the storage of hazardous waste prior to the recycling process. The facility can receive mercury containing lamps from a wide variety of generators. Most of the lamps will be received whole and unbroken. However, the facility may also receive 55-gallon drums of crushed lamps.

Figure 1 of this permit is the site plan for the facility. Figure 2 of the permit shows the location of the proposed hazardous waste container storage area. Figure 3 shows the arrangement of containers in the hazardous waste container storage area. These figures also show the location of the common dock area where shipments of wastes will be off-loaded from the trucks used to transport them to the facility. The permittee is prohibited from conducting waste management activities in areas that are not specifically identified in the approved permit application or this permit.

The legal description for the permitted facility (the entire Lot F) is the N ½ of SW ¼ Section 34 T. 45 N. R. 9E. PM: 3<sup>rd</sup> Lot 4 of Fischer's Industrial Park subdivision, in the N ½ of the SW ¼ Sec. 34 in the county of Lake in the State of Illinois.

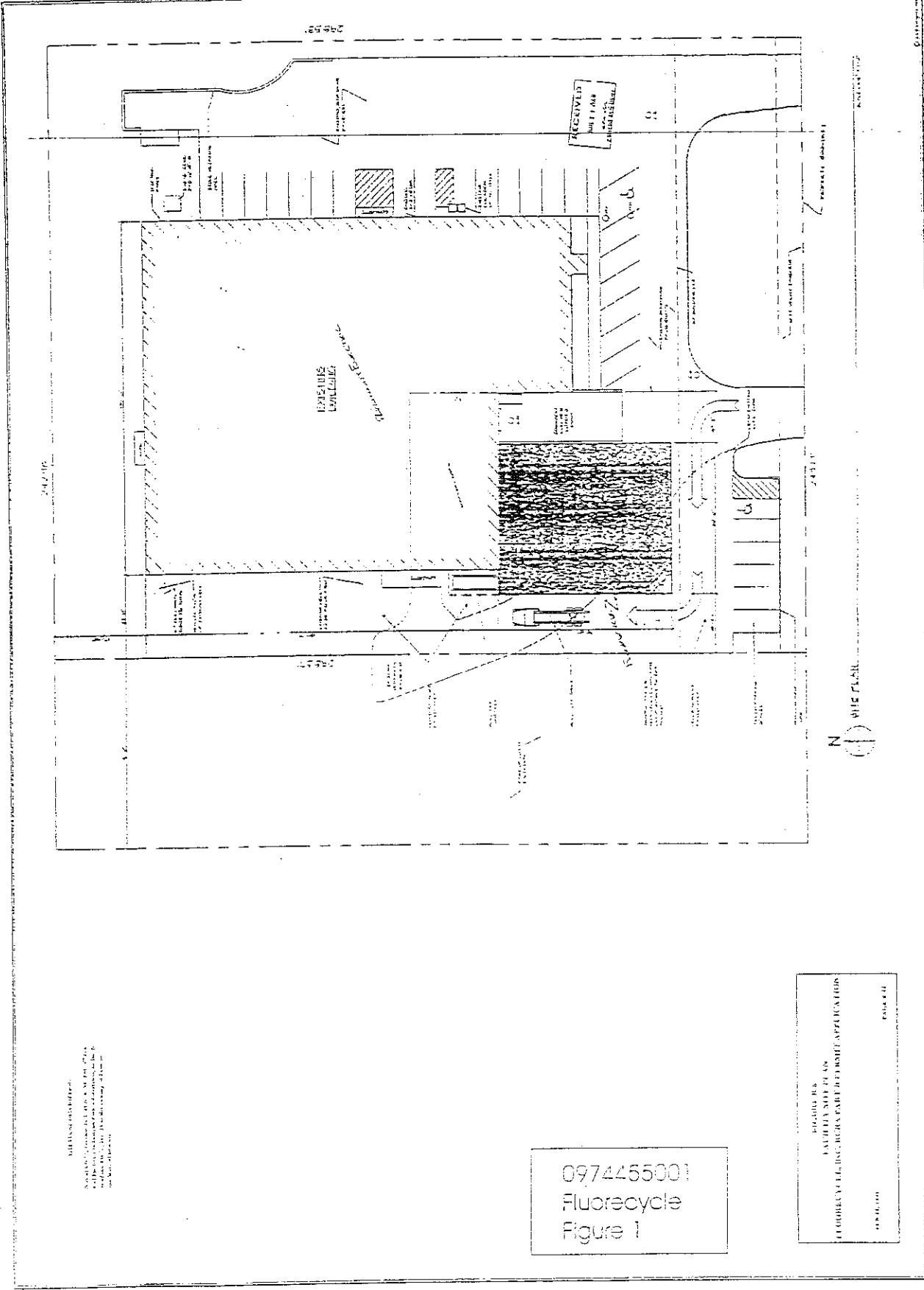
FLUORECYCLE ADDITION  
PARKMOUNT ELECTRIC SUPPLY, INC.  
2700 N. CONCRETE DRIVE  
MILWAUKEE, WISCONSIN 53212

NOTES

**DIRECT DESIGN**  
...LTD...  
ARCHITECTS

200 E. NORTH 2  
PRINCETON, IL 60090  
TEL: 312-344-8422  
FAX: 312-344-8444

PROJECT NO. 0113  
DATE: 10/1/93  
SHEET NO. 020



0974455001  
Fluorecycle  
Figure 1

FLUORECYCLE, INC. REQUEST FOR PROPOSAL APPLICATION  
PARKMOUNT ELECTRIC SUPPLY, INC.  
2700 N. CONCRETE DRIVE  
MILWAUKEE, WISCONSIN 53212

Figure B-6







LOGISTICS & PROCESSING

“0-3”

ALISE

30'-0"  
AISLE

ALICE

PISTLE

1

FILE

LOGISTICS & PROCESSING

MATHIEU *et al.* LIVING, SCLERATE, AND CLATHRATE APOLYMERIZATION STORAGE OF H<sup>+</sup> FOR SMALLER LAMPS IN SHIFTING MATHEMATICS

OFFICE

TOILET

~~WIS-E~~

ALST

307

FILE

- MATERIAL IN (1) HPM, STORAGE, & STAGING, FLOOR AREA (69000) (CAPACITY 2 ROWS / 14 PALETS)

LOGISTICS & PROCESSING

$$\frac{30^{\circ}}{4\text{ min}}$$

## MAINTAINING, STORAGING, STAGING FOR INTERIORS

1515

1854

30" min

- MATERIAL & PALETTE STORAGE RACKS  
(4'x12') TWO LEVELS & FLOOR.

MATERIAL & FALL-STOPPING RAILS  
(4'x12") TWO LEVELS & FLOOR.

0974455001-Lake County  
Fluorecycle  
Figure 3

SHEET  
B18A

PROJECT  
VC-2153  
FILE  
FBI (stor)

DATE  
15 OCT 200

SCALE  
1/4" = 1'-0"

RCRA STORAGE AREA  
ARRANGEMENT PLAN

FLUORECYCLE, INC.  
27780 West Concrete Drive  
Ingleside, Illinois 60041

553

## Section I - CONTAINERS

### A. SUMMARY

All wastes received from off-site generators must be held in one of the containers specified in the approved permit application. Whole, unbroken lamps will be held in containers made of cardboard and fiberboard. The size of the containers will vary based on the size of the lamps they hold. 55-gallon steel drums will be used to hold crushed lamps. All containers must be DOT-approved for the materials that they contain. Both new and used containers can be received from off-site generators.

### B. WASTE IDENTIFICATION

1. The permittee is prohibited from receiving or storing wastes that are not mercury-containing lamps. "Mercury-containing lamp" means an electric lamp into which mercury is purposely introduced by the manufacturer for the operation of the lamp. Mercury-containing lamps include, but are not limited to, fluorescent lamps and high-intensity discharge lamps (e.g. lamps). Incandescent light bulbs, (a nonhazardous waste), ballasts, batteries, thermostats, compatible wastes that are not specifically identified in the application, or other types of waste shall not be received at the facility or placed in the RCRA storage area. This RCRA permit may need to be modified in accordance with 35 Il. Adm. Code 703 should the permittee wish to receive and store other types of waste in the future.
2. The permittee shall not receive or store wastes that contain free liquids at the Fluorecycle facility.
3. The Permittee shall not receive or store ignitable or reactive waste at the Fluorecycle facility.
4. The Permittee shall not receive or store incompatible wastes, or incompatible wastes and materials, at the Fluorecycle facility.
5. The permittee is prohibited from receiving crushed lamps. In order to receive drums of crushed lamps, the permittee needs to provide, and receive approval of, a revised closure cost estimate that addresses the cost of processing the maximum volume of whole lamps and the sixteen (16) 55-gallon drums of crushed lamps proposed in the permit application. If this revised cost estimate is greater than the existing financial assurance for the facility, the permittee shall also provide, and receive approval of, a revised financial assurance mechanism.

### C. CONTAINER STORAGE AREA

1. The maximum volume of containerized waste that can be placed/stored in the container storage area at any one time shall not exceed 5,772.5 cubic feet (without any drums of crushed lamps, or 5,452.5 cubic feet with sixteen (16) 55-gallon drums of crushed lamps. The permitted storage volume is further defined below:

Western Storage Racks:

[All boxes] 2 racks x 3 pallets per shelf x 3 high x 80 ft<sup>3</sup> per pallet = 1,440 cf.

or

[4 pallets of 55-gal. drums] 14 pallets x 80 ft<sup>3</sup> per pallet = 1,120 cf. (plus 16 55-gal. drums)

Eastern Storage Racks along wall:

2 racks x 3 pallets per shelf x 3 high x 80 ft<sup>3</sup> per pallet = 1,440 cf.

Floor Storage

Western Row (8' lamps): 5' x 30' x 6.5' = 975 cf

Eastern Rows: 2 (4' x 30' x 6.5') = 1,560 cf

Area north of Western Storage Rack: 6' x 5' x 6.5' = 195 cf

Area between Eastern Storage Racks: 3' x 5' x 6.5' = 97.5 cf

Area north of Eastern Storage Rack: 2' x 5' x 6.5' = 65 cf

2. The permittee shall perform a complete annual inspection of the storage area floor's surface coating / concrete sealer. The permittee shall perform maintenance on the surface coating / concrete sealer as necessary to insure the integrity of the coating.

### D. CONDITION OF CONTAINERS

1. If a container holding hazardous waste is not in good condition (e.g., severe rusting, apparent structural defects) or if it begins to leak, the Permittee must transfer the hazardous waste from this container to a container that is in good condition or manage the waste in accordance with the Approved Permit Application.
2. Any transfer of waste that is required to comply with Condition I.D.1 must be recorded in the facility's operating record.
3. Packaging of all wastes accepted for storage in the container storage area shall meet the requirements of 49 CFR 172, 178 and 179 and all applicable D.O.T. and Universal Waste regulations at 35 IAC 733. All containers must be marked and placarded in accordance with 49 CFR 172 or 35 IAC 733.

4. The contents of each container shall be clearly identified on the top or side of the container in accordance with 49 CFR 172 prior to being placed in the container storage area.

**E. COMPATIBILITY OF WASTE WITH CONTAINERS**

1. The Permittee must use a container made of or lined with material that will not react with, and is otherwise compatible with, the waste to be stored, so that the ability of the container to contain the waste is not impaired.

**F. MANAGEMENT OF CONTAINERS**

The Permittee shall comply with the following container management practices:

1. A container holding hazardous waste must always be closed during storage, except when it is necessary to add or remove waste.
2. A container holding hazardous waste must not be opened, handled, or stored in a manner that may rupture the container or cause it to leak.
3. Containers and pallets of containers shall only be placed in the RCRA container storage area. Containers, or pallets of containers, shall not be stacked on top of each other.
4. Containers shall be stored in accordance with the storage arrangement identified on Figure 3 of this permit. Containers stored on the floor shall not be stacked more than 6.5 feet high.
5. Containers that are stored on the floor (e.g. not stored on the storage racks) shall be removed from the container storage area within seven days of the date they were placed there.
6. Wastes shall only be received at the site in the common loading dock area (common area) identified on Figures B.2 and B.6 of the approved permit application (Figures 1 and 2 of this permit). Wastes shall only be located in this area long enough to unload the truck that was used to ship the wastes and perform the waste receipt inspection procedures described in Section C.4a of the approved permit application, but in no case shall wastes be located in this area for more than 8 hours. Storage of wastes in this area is prohibited.
7. All waste is considered to be "received" at the facility when it crosses the property line. The receiving process continues thru the unloading of the wastes at the common loading dock area where the incoming waste inspection procedures will take place and the facility determines whether to accept the waste.

## **G. GENERAL OPERATING REQUIREMENTS**

1. The Permittee shall operate the container storage area in accordance with the Approved Permit Application, subject to the conditions of this permit.
2. All hazardous and non-hazardous special wastes generated by this facility which require further treatment or disposal off-site must be transported to the receiving facility in accordance with the applicable regulations in 35 IAC, Parts 709, 722, 723, 807 and 809, and the Agency's special waste hauling and manifests system.
3. The Permittee shall comply with the applicable Land Disposal Restrictions at 35 Il. Adm. Code Part 728 for all wastes (including components of the crushed lamps, glass, plastic, metal, phosphor powder) shipped off-site for further treatment, storage, or disposal in a landfill.
4. Changes to the permitted facility (the entire Lot F) may constitute a cause for modification of the RCRA permit pursuant to 35 IAC 703 Subpart G. Changes to the facility that do not involve waste management would be considered Class 1 modifications. The application for these types of Class 1 modifications must contain sufficient information to demonstrate that the hazardous waste management operations (including emergency response and means of egress) will not be impacted by the proposed modification.

## **H. INSPECTION**

1. The Permittee shall inspect the containers, container storage area, and emergency equipment in accordance with the inspection schedule, specified in Attachment A of this permit. All records of inspections at the facility shall be maintained in the facility operating record.
2. Inspection records required by Condition I.H.1 above, must include the date and time of each inspection, the name of the inspector, notation of the observations made, and the nature and date of any repairs or remedial actions.
3. The permittee shall continuously monitor the ambient air in the facility for mercury vapors whenever the facility is in operation. The mercury monitor shall be located such that it is capable of taking a representative sample of any air emissions from the RCRA container storage area and the processing area. The monitor shall be capable of collecting and reporting both a time weighted average (TWA) and an instantaneous mercury vapor concentration. The instantaneous concentration reading shall be tied to an audible alarm system that will sound if the mercury vapor concentration exceeds the level identified in Condition I.I.d below.

## **I. CONTINGENCY PLAN**

1. In addition to the conditions listed in the application, the permittee shall implement the Contingency Plan anytime:
  - a. Three hundred-sixty (360) or more lamps are accidentally broken in a single incident,
  - b.  $\frac{1}{2}$  or more of the contents of a 55 gallon drum of crushed lamps is spilled,
  - c. The ambient air mercury vapor concentration exceeds  $0.05 \text{ mg/m}^3$  based on an 10-hr time weighted average [TWA], or
  - d. The ambient air mercury vapor concentration exceeds  $0.1 \text{ mg/m}^3$  at any time (based on an instantaneous reading).
2. The Agency's Bureau of Land Regional Office in Des Plaines shall be notified verbally and in writing within 24 hours of implementing the contingency plan.
3. The permittee shall have and properly maintain a half-face respirator with approved HEPA/mercury cartridges for each employee at Fluorecycle. The permittee shall also have and maintain two additional respirators with HEPA/mercury cartridges.

## **J. CLOSURE**

At closure, at a minimum, all hazardous waste and hazardous waste residues and constituents must be removed from the container storage area. Remaining wastes, liners, bases, soil and groundwater containing or contaminated with hazardous waste, hazardous waste residue or hazardous constituents must be decontaminated or removed. Closure of the container storage area shall be carried out in accordance with the closure plan in the approved permit application, as modified below:

1. The Permittee shall notify the Illinois EPA Bureau of Land Permit Section in writing of its intent to close the container storage area at least 180 days prior to the date closure is expected to begin. Along with this notification, the Permittee shall submit a sampling and analysis plan to be used in demonstrating the container storage area has been properly decontaminated. This plan must be approved by the Illinois EPA Bureau of Land Permit Section in writing prior to being implemented. Illinois EPA review of this plan will be subject to the permit appeal provisions contained in Sections 39(a) and 40(a) of the Illinois Environmental Protection Act. The response from the Illinois EPA will approve and establish:
  - a. The sampling and decontamination plan;

- b. What contaminants must be analyzed for;
  - c. Analytical requirements (SW-846 Methods should be utilized);
  - d. The contaminant level at which decontamination or removal is considered complete.
2. The Permittee shall steam clean and triple rinse the storage racks and concrete floor of the container storage area identified in Condition I.C.2 of this permit. All sweepings, washwater and rinsate generated during the closure of the unit shall be managed as a hazardous waste, unless it can be shown to be exempt under 35 IAC Part 721. An independent, registered, professional engineer must certify that the surface has no cracks, gaps, or other defects which would allow waste to migrate through to the underlying soil or an approved sampling plan must be used to establish clean closure.
  3. The Permittee shall provide post-closure care in accordance with 35 IAC Part 724 for the container storage area if all of the hazardous wastes or contaminated material or media cannot be practicably removed or decontaminated in accordance with the closure requirements outlined in the permit and in the approved closure plan. If it is determined that the closure requirements cannot be met and post-closure care is required, this Permit must be modified to require post-closure care in accordance with 35 IAC, Subtitle G, Part 724, Subparts G and H.
  4. Should post-closure care, as described above, become necessary, the Permittee shall submit an application for modification to this permit, including an amended closure and post-closure care plan for this unit, within thirty (30) days following discovery that clean closure cannot be accomplished. If a determination is made to not pursue clean closure prior to the implementation of the closure plan, the modification request shall be made no later than sixty (60) days after the determination is made.
  5. Financial assurance for closure and post-closure of the container storage area, if required, shall be provided within thirty (30) days following modification of the permit.
  6. Within sixty (60) days after completing closure of the container storage area, the Permittee shall submit certification to the Agency that the unit has been closed in accordance with the approved closure plan.

The closure certification form in Attachment B to this permit or a certification with identical wording must be used. Signatures must meet the requirements of 35 Ill. Adm. Code Section 702.126. The independent engineer (registered in the State of Illinois) should be present at all critical, major points (activities) during the closure. These might include decontamination, soil sampling, soil removal, backfilling, final cover placement, etc. The

frequency of inspections by the independent engineer must be sufficient to determine the adequacy of each critical activity. Financial assurance must be maintained for the area(s) until the Agency approves the closure certification for the unit. The Agency's review of closure certification for partial or final closure will be conducted in accordance with 35 IAC 724.243.

A Closure Documentation Report is to be submitted with the closure certification which includes the following items, if applicable:

- a. The volume of waste and waste residue removed, including wastes resulting from decontamination activities.
  - b. A description of the method of waste handling and transport.
  - c. Copies of the waste manifests.
  - c. A description of the sampling and analytical methods used including sample preservation methods and chain-of-custody information.
  - d. A chronological summary of closure activities and the cost involved.
  - e. Tests performed, methods and results.
  - f. Color photographs of closure activities that document conditions before, during and after closure.
  - g. A scale drawing of all excavated or decontaminated areas and sample locations.
7. To avoid creating another regulated storage unit during closure, obtain any necessary permits for waste disposal prior to initiating excavation activities. If it is necessary to store excavated hazardous waste on-site prior to off-site disposal, do so only in containers or tanks for less than ninety (90) days or in the case of a partial closure, a properly permitted unit. Do not create regulated waste pile units by storing the excavated hazardous waste in piles. The ninety (90) day accumulation time exemption (35 IAC 722.134) only applies to containers and tanks.
  8. Under the provisions of 29 CFR 1910 (51 FR 15,654, December 19, 1986), cleanup operations must meet the applicable requirements of OSHA's Hazardous Waste Operations and Emergency Response standard. These requirements include hazard communication, medical surveillance, health and safety programs, air monitoring, decontamination and training. General site workers engaged in activities that expose or potentially expose them to



hazardous substances must receive a minimum of 40 hours of safety and health training off site plus a minimum of three days of actual field experience under the direct supervision of a trained experienced supervisor. Managers and supervisors at the cleanup site must have at least an additional eight hours of specialized training on managing hazardous waste operations.

9. If the Agency determines that implementation of this closure plan fails to satisfy the requirements of 35 Ill. Adm. Code, Section 724.211, the Agency reserves the right to amend the closure plan. Revisions of closure plans are subject to the appeal provisions of Section 40 of the Illinois Environmental Protection Act.
10. Please be advised that the requirements of the Responsible Property Transfer Act (Public Act 85-1228) may apply to your facility due to the management of RCRA hazardous waste. In addition, please be advised that if you store or treat on-site generated hazardous waste in containers or tanks pursuant to 35 IAC 722.134, those units are subject to the closure requirements identified in 35 IAC 722.134(a)(1).

#### **K     Financial Assurance**

1. The financial assurance documents required by 35 Ill. Adm. Code 724.243 shall be in place at least 60 days before wastes are stored in the RCRA container storage area.
2. Pursuant to 35 Ill. Adm. Code 724.242(b), during the active life of the facility, the permittee shall adjust the closure cost estimate in Attachment C of this permit for inflation within 60 days prior to the anniversary date of the establishment of the financial instrument.

#### **L.   COMPLIANCE SCHEDULE**

On or before August 2, 2002, the permittee shall provide the following to the Illinois EPA Bureau of Land Permit Section:

1. Information formatted as revised pages to Section C of the permit application that include the following information:
  - a. The components in a "standard" 4-foot fluorescent lamp and a HID lamp and the approximate percentages at which they are present. The permittee shall identify any "nonstandard" components that may be present in the waste.
2. A revised Contingency Plan that includes the following:

- a. Revise Sections G-3 and G-4 to consistently identify the amount of mercury vapor in the facility's air that is safe to breath without a respirator is  $0.05 \text{ mg/m}^3$  based on an 10-hr time weighted average [TWA], or  $0.1 \text{ mg/m}^3$  at any time (based on an instantaneous reading).
  - b. Revise Section G-4a to list the local state and federal agencies that will be notified in the event of an incident at the facility. Provide the name, address and phone number for each one.
3. Documentation (e.g. a copy of the cover letter) that copies of the contingency plan approved in this permit have been sent to local police and fire departments, hospitals, contractors, and state and local emergency response teams to familiarize them with the facility and actions needed in case of emergency.
4. Documentation of the agreements and arrangements made with local police and fire departments, hospitals, contractors, and state and local emergency response teams to familiarize them with the facility and actions needed in case of emergency. If necessary, documentation must be provided that any agency identified in 35 Ill. Adm. Code 724.153(b) declined to enter an agreement or arrangement.
5. Documentation that the Training Director has received training in the RCRA hazardous waste regulations. The permittee shall also provide revised wording for Section H-1c of the application that specifically references this documentation.

## SECTION II STANDARD CONDITIONS

### GENERAL REQUIREMENTS

1. **EFFECT OF PERMIT.** The existence of a RCRA permit shall not constitute a defense to a violation of the Environmental Protection Act or Subtitle G, except for development, modification or operation without a permit. Issuance of this permit does not convey property rights or any exclusive privilege. Issuance of this permit does not authorize any injury to persons or property or invasion of other private rights, or infringement of state or local law or regulations. (35 IAC 702.181)
2. **PERMIT ACTIONS.** This permit may be modified, reissued or revoked for cause as specified in 35 IAC 703.270 through 703.273 and Section 702.186. The filing of a request by the Permittee for a permit modification or revocation, or a notification of planned changes or anticipated noncompliance on the part of the Permittee does not stay the applicability or enforceability of any permit condition. (35 IAC 702.146)
3. **SEVERABILITY.** The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances and the remainder of this permit shall not be affected thereby. (35 IAC 700.107)
4. **PERMIT CONDITION CONFLICT.** In case of conflict between a special permit condition and a standard condition, the special condition will prevail. (35 IAC 702.160)
5. **DUTY TO COMPLY.** The Permittee shall comply with all conditions of this permit except for the extent and for the duration such noncompliance is authorized by an emergency permit. Any permit noncompliance constitutes a violation of the Environmental Protection Act and is grounds for enforcement action; permit revocation or modification; or for denial of a permit renewal application. (35 IAC 702.141 and 703.242)
6. **DUTY TO REAPPLY.** If the Permittee wishes to continue an activity allowed by this permit after the expiration date of this permit, the Permittee must apply for a new permit at least 180 days before this permit expires, unless permission for a later date has been granted by the Agency. (35 IAC 702.142 and 703.125)
7. **PERMIT EXPIRATION.** This permit and all conditions herein will remain in effect beyond the permit's expiration date if the Permittee has submitted a timely, complete

application (see 35 IAC 703.181-703.209) and through no fault of the Permittee the Agency has not issued a new permit as set forth in 35 IAC 702.125.

8. **NEED TO HALT OR REDUCE ACTIVITY NOT A DEFENSE.** It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. (35 IAC 702.143)
9. **DUTY TO MITIGATE.** In the event of noncompliance with the permit, the permittee shall take all reasonable steps to minimize releases to the environment, and shall carry out such measures as are reasonable to prevent significant adverse impacts on human health or the environment. (35 IAC 702.144)
10. **PROPER OPERATION AND MAINTENANCE.** The Permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory, and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of the permit. (35 IAC 702.145)
11. **DUTY TO PROVIDE INFORMATION.** The Permittee shall furnish to the Agency, within a reasonable time, any relevant information that the Agency may request to determine whether cause exists for modifying, revoking and reissuing or terminating this permit, or to determine compliance with this permit. The Permittee shall also furnish to the Agency, upon request, copies of records required to be kept by this permit. (35 IAC 702.148)
12. **INSPECTION AND ENTRY.** The Permittee shall allow an authorized representative of the Agency, upon the presentation of credentials and other documents as may be required by law, to:
  - a. Enter at reasonable times upon the Permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
  - b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

- c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
- d. Sample or monitor, at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the appropriate Act, any substances or parameters at any location. (35 IAC 702.149)

**13. MONITORING AND RECORDS. (35 IAC 702.150)**

- a. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. The method used to obtain a representative sample of the waste must be the appropriate method from Appendix A of 35 IAC 721. Laboratory methods must be those specified in Test Methods for Evaluating Solid Waste: Physical/Chemical Methods, SW-846, latest versions; Methods for Chemical Analysis of Water and Wastes, EPA-600/4-79-020, latest versions; or an equivalent method as specified in the approved Waste Analysis Plan.
- b. The Permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports and records required by this permit, and records of all data used to complete the application for this permit for a period of at least 3 years from the date of the sample, measurement, report or application. These periods may be extended by request of the Agency at any time. The permittee shall maintain records from all groundwater monitoring wells and associated groundwater surface elevations, for the active life of the facility, and for disposal facilities for the post-closure care period as well.
- c. Records of monitoring information shall include:
  - i. The date(s), exact place, and time of sampling or measurements;
  - ii. The individual(s) who performed the sampling or measurements;
  - iii. The date(s) analyses were performed;
  - iv. The individual(s) who performed the analyses;
  - v. The analytical technique(s) or method(s) used; and
  - vi. The result(s) of such analyses. (35 IAC 702.150)

**14. REPORTING PLANNED CHANGES.** The permittee shall give notice to the Agency as soon as possible of any planned physical alterations or additions to the permitted facility. For a new HWM facility, the permittee may not commence treatment, storage or disposal of hazardous waste; and for a facility being modified the permittee may not treat, store or dispose of hazardous waste in the modified portion of the facility, until:

- a. The permittee has submitted to the Agency by certified mail or hand delivery a letter signed by the permittee and a registered professional engineer stating that the facility has been constructed or modified in compliance with the permit; and
- b.
  1. The Agency has inspected the modified or newly constructed facility and finds it is in compliance with the condition of the permit; or
  2. If, within 15 days of the date of submission of the letter in paragraph (a), the permittee has not received notice from the Agency of its intent to inspect, prior inspection is waived and the permittee may commence treatment, storage or disposal of hazardous waste. (35 IAC 703.244 and 702.152(a))

**15. ANTICIPATED NONCOMPLIANCE.** The Permittee shall give advance notice to the Agency of any planned changes in the permitted facility or activity that may result in noncompliance with permit requirements. For a new facility, the permittee shall not treat, store or dispose of hazardous waste; and for a facility being modified; the permittee shall not treat, store or dispose of hazardous waste in the modification portion of the facility, except as provided in Section 703.280, until:

- a. The permittee has submitted to the Agency by certified mail or hand delivery a letter signed by the permittee and a registered professional engineer stating that the facility has been constructed or modified in compliance with the permit; and
- b. Either:
  - i. The Agency has inspected the modified or newly constructed facility and finds it is in compliance with the conditions of the permit; or
  - ii. Within 15 days after the date submission of the letter in section i above, the permittee has not received notice from the Agency of its intent to inspect, the permittee may commence treatment, storage or disposal of hazardous waste.

(35 IAC 702.152(b) and 703.247)

16. **TRANSFER OF PERMITS.** This permit is not transferable to any person except after notice to the Agency. The Agency may require modification of the permit to change the name of the permittee and incorporate such other requirements as may be necessary under the appropriate Act. (See Sections 703.260 and 703.270, in some cases modification is mandatory.) (35 IAC 702.152(c))
17. **MONITORING REPORTS.** Monitoring results shall be reported at the intervals specified in the permit. (35 IAC 702.152(d))
18. **COMPLIANCE SCHEDULES.** Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than specified in 35 IAC 702.162. (35 IAC 702.152(e))
19. **TWENTY-FOUR HOUR REPORTING.**
  - a. The Permittee shall report to the Agency any noncompliance with the permit that may endanger health or the environment. Any such information shall be reported orally within 24 hours from the time the Permittee becomes aware of the following circumstances. This report shall include the following:
    - i. Information concerning the release of any hazardous waste that may cause an endangerment to public drinking water supplies.
    - ii. Information concerning the release or discharge of any hazardous waste or of a fire or explosion at the HWM facility, which could threaten the environment or human health outside the facility.
  - b. The description of the occurrence and its cause shall include:
    - i. Name, address, and telephone number of the owner or operator;
    - ii. Name, address, and telephone number of the facility;
    - iii. Date, time, and type of incident;
    - iv. Name and quantity of material(s) involved;
    - v. The extent of injuries, if any;

- vi. An assessment of actual or potential hazards to the environment and human health outside the facility, where applicable; and
  - vii. Estimated quantity and disposition of recovered material that resulted from the incident.
- c. A written submission shall also be provided within 5 days of the time the Permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance including exact dates and times and if the noncompliance has not been corrected; the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance. The Agency may waive the five day written notice requirement in favor of a written report within fifteen days. (35 IAC 702.152(f) and 703.245(b))
20. **OTHER NONCOMPLIANCE.** The Permittee shall report all instances of noncompliance not otherwise required to be reported under Standard Conditions 17, 18, and 19, at the time monitoring reports, as required by this permit, are submitted. The reports shall contain the information listed in Standard Condition 19. (35 IAC 702.152(g))
21. **OTHER INFORMATION.** Where the Permittee becomes aware that it failed to submit any relevant facts in the permit application, or submitted incorrect information in a permit application or in any report to the Agency, the Permittee shall promptly submit such facts or information. (35 IAC 702.152(h))
22. **REPORTING REQUIREMENTS.** The following reports required by 35 Ill. Adm. Code 724 shall be submitted in addition to those required by 35 Ill. Adm. Code 702.152 (reporting requirements):
- a. Manifest discrepancy report: if a significant discrepancy in a manifest is discovered, the permittee must attempt to reconcile the discrepancy with the waste generator or transporter. If the discrepancy is not resolved within 15 days after receiving the waste, the permittee must immediately submit to the Agency a letter describing the discrepancy and attempts to reconcile it and a copy of the manifest or shipping paper at issue. (35 IAC 724.172(b))
  - b. Unmanifested waste report: The permittee must submit to the Agency within 15 days of receipt of unmanifested waste an unmanifested waste report on EPA form 8700-13B. (35 IAC 724.176)



- c. Annual report: an annual report must be submitted covering facility activities during the previous calendar year. (35 IAC 724.175)

**23. SUBMITTAL OF REPORTS OR OTHER INFORMATION.** All written reports or other written information required to be submitted by the terms of this permit shall be sent to:

Illinois Environmental Protection Agency  
Division of Land Pollution Control #33  
Planning and Reporting Section  
1021 North Grand Avenue East  
Post Office Box 19276  
Springfield, Illinois 62794-9276

**24. SIGNATORY REQUIREMENT.** All permit applications, reports or information submitted to the Agency shall be signed and certified as required by 35 IAC 702.126. (35 IAC 702.151)

**25. CONFIDENTIAL INFORMATION.** Any claim of confidentiality must be asserted in accordance with 35 IAC 702.103 and 35 IAC 161.

**26. DOCUMENTS TO BE MAINTAINED AT FACILITY SITE.** The Permittee shall maintain at the facility, until closure is complete, the following documents and amendments, revisions and modifications to these documents:

- a. Waste analysis plan as required by 35 IAC 724.113(b) and this permit.
- b. Personnel training documents and records as required by 35 IAC 724.116(d) and this permit.
- c. Contingency plan as required by 35 IAC 724.153(a) and this permit.
- d. Closure plan as required by 35 IAC 724.212(a) and this permit.
- e. Cost estimate for facility closure as required by 35 IAC 724.242(d) and this permit.
- f. Operating record as required by 35 IAC 724.173 and this permit.
- g. Inspection schedules as required by 35 IAC 724.115(b) and this permit.

27. **WASTE MINIMIZATION.** The Permittee shall certify at least annually that the Permittee has a program in place to reduce the volume and toxicity of hazardous waste that he generates to the degree determined by the Permittee to be economically practicable, and the proposed method of treatment, storage, or disposal is that practicable method currently available to the Permittee which minimizes the present and future threat to human health and the environment, in accordance with 35 IAC 724.173(b)(9).

### **GENERAL FACILITY STANDARDS**

28. **NOTICE OF WASTE FROM A FOREIGN SOURCE.** The permittee who has arranged to receive hazardous waste from a foreign source must notify the Agency in writing at least four weeks in advance of the date the waste is expected at the facility. (35 IAC 724.112(a))
29. **NOTICE OF WASTE FROM OFF-SITE.** The Permittee who receives hazardous waste from an off-site source (except where the Permittee is also the generator), must inform the generator in writing that the permittee has the appropriate permits for, and will accept, the waste the generator is shipping. The Permittee must keep a copy of this written notice as part of the facility operating record. (35 IAC 724.112(b))
30. **GENERAL WASTE ANALYSIS.** The Permittee shall comply with the procedures described in the approved waste analysis plan. (35 IAC 724.113)
31. **SECURITY.** The Permittee shall comply with the security provisions of 35 IAC 724.114(b) and (c).
32. **GENERAL INSPECTION REQUIREMENTS.** The Permittee shall follow the approved inspection schedule. The Permittee shall remedy any deterioration or malfunction discovered by an inspection as required by 35 IAC 724.115(c). Records of inspections shall be kept as required by 35 IAC 724.115(d).
33. **PERSONNEL TRAINING.** The Permittee shall conduct personnel training as required by 35 IAC 724.116 and shall maintain training documents and records as required by 35 IAC 724.116(d) and (e).
34. **GENERAL REQUIREMENTS FOR IGNITABLE, REACTIVE, OR INCOMPATIBLE WASTE.** The Permittee shall comply with the requirements of 35 IAC 724.117.

## **PREPAREDNESS AND PREVENTION**

35. **DESIGN AND OPERATION OF FACILITY.** The Permittee shall maintain and operate the facility to minimize the possibility of fire, explosion, or any unplanned sudden or non-sudden release of hazardous waste constituents to air, soil, or surface water which could threaten human health or the environment. (35 IAC 724.131)
36. **REQUIRED EQUIPMENT.** The Permittee shall equip the facility with the equipment set forth in the approved contingency plan, as required by 35 IAC 724.132.
37. **TESTING AND MAINTENANCE OF EQUIPMENT.** The Permittee shall test and maintain the equipment specified in condition 36 as necessary to assure its proper operation in time of emergency. Such testing and maintenance activities are set forth in the approved inspection schedule. (35 IAC 724.133)
38. **ACCESS TO COMMUNICATIONS OR ALARM SYSTEM.** The Permittee shall maintain access to the communications or alarm system as required by 35 IAC 724.134.
39. **REQUIRED AISLE SPACE.** The Permittee shall maintain aisle space as required by 35 IAC 724.135 and National Fire Protection Association (NFPA) requirements.
40. **ARRANGEMENTS WITH STATE AND LOCAL AUTHORITIES AND EMERGENCY RESPONSE CONTRACTORS.** The Permittee shall attempt to make emergency response arrangements with State and local authorities and agreements with State emergency response teams and emergency response contractors and equipment suppliers as required by 35 IAC 724.137. If State or local officials refuse to enter in preparedness and prevention arrangements with the Permittee, the Permittee must document this refusal in the operating record.

## **CONTINGENCY PLAN**

41. **IMPLEMENTATION OF PLAN.** The provisions of the contingency plan must be carried out by the Permittee immediately whenever there is a fire, explosion or release of hazardous waste or hazardous waste constituents which could threaten human health or the environment (35 IAC 724.151(b)). Within 15 days of any incident that requires implementation of the contingency plan, the owner or operator must submit a written report to the Agency as required by 35 IAC 724.156(j).
42. **COPIES OF PLAN.** A copy of the contingency plan, including any revisions, must be maintained at the facility and submitted to all local police and fire departments, hospitals and state and local emergency response teams as required by 35 IAC 724.153.

- 43. **AMENDMENTS TO PLAN.** The Permittee shall review and immediately amend, if necessary, the contingency plan, as required by 35 IAC 724.154.
- 44. **EMERGENCY COORDINATOR.** A trained emergency coordinator shall be available at all times in case of an emergency as required by 35 IAC 724.155 and 724.156.

### **MANIFEST SYSTEM RECORD KEEPING AND REPORTING**

- 45. **MANIFEST SYSTEM.** The Permittee shall comply with the manifest requirements of 35 IAC 724.171, 724.172, 724.176 and 733.
- 46. **OPERATING RECORD.** The Permittee shall maintain a written operating record at the facility in accordance with 35 IAC 724.173.
- 47. **ANNUAL REPORT.** The Permittee shall prepare and submit an annual report to the Agency prior to March 1st of each year in accordance with the requirements of 35 IAC 724.175.

### **CLOSURE**

- 48. **PERFORMANCE STANDARD.** The Permittee shall close the facility as required by 35 IAC 724.211 and in accordance with the approved closure plan.
- 49. **AMENDMENT TO CLOSURE PLAN.** The Permittee must amend the closure plan whenever there is a change in the expected year of closure or whenever a change in the facility operation plans or facility design affects the closure plan pursuant to 35 IAC 724.212(c).
- 50. **NOTIFICATION OF CLOSURE.** The Permittee shall notify the Agency at least 60 days prior to the date it expects to begin closure. (35 IAC 724.212(d))
- 51. **TIME ALLOWED FOR CLOSURE.** After receiving the final volume of hazardous waste, the Permittee shall treat or remove from the site all hazardous waste and complete closure activities in accordance with the schedule(s) specified in the closure plan. (35 IAC 724.213)
- 52. **DISPOSAL AND/OR DECONTAMINATION OF EQUIPMENT.** When closure is completed, the Permittee shall decontaminate and/or dispose of all facility equipment and structures as required by the approved closure (35 IAC 724.214) plan.

- 53. CERTIFICATION OF CLOSURE.** When closure is completed, the Permittee shall submit certification to the Agency in accordance with 35 IAC 724.215 that the facility has been closed as specified by the approved closure plans.
- 54. COST ESTIMATE FOR FACILITY CLOSURE.** The Permittee's original closure cost estimate, prepared in accordance with 35 IAC 724.242, must be:
- a. Adjusted for inflation either 60 days prior to each anniversary of the date on which the first closure cost estimate was prepared or if using the financial test or corporate guarantee, within 30 days after close of the firm's fiscal year.
  - b. Revised whenever there is a change in the facility's closure plan increasing the cost of closure.
  - c. Kept on record at the facility and updated. (35 IAC 724.242)
- 55. FINANCIAL ASSURANCE FOR FACILITY CLOSURE.** The Permittee shall demonstrate compliance with 35 IAC 724.243 by providing documentation of financial assurance, as required by 35 IAC 724.251, in at least the amount of the cost estimates required by the previous Permit Condition. Changes in financial assurance mechanisms must be approved by the Agency pursuant to 35 IAC 724.243.
- 56. LIABILITY REQUIREMENTS.** The Permittee shall demonstrate continuous compliance with the requirements of 35 IAC 724.247 and the documentation requirements of 35 IAC 724.251.
- 57. INCAPACITY OF OWNERS OR OPERATORS, GUARANTORS, OR FINANCIAL INSTITUTIONS.** The Permittee shall comply with 35 IAC 724.248 whenever necessary.

## **LAND DISPOSAL RESTRICTIONS**

- 58. DISPOSAL PROHIBITION.** Any waste identified in 35 IAC Part 728, Subpart C, or any mixture of such a waste with nonrestricted wastes, is prohibited from land disposal unless it meets the standards of 35 IAC Part 728, Subpart D, or unless it meets the requirements for exemptions under Subpart C. "Land disposal" means placement in or on the land and includes, but is not limited to, placement in a landfill, surface impoundment, waste pile, injection well, land treatment facility, or vault intended for disposal.
- 59. DILUTION PROHIBITION.** The Permittee shall not in any way dilute a restricted waste or residual from treatment of a restricted waste as a substitute for adequate treatment in order to achieve compliance with 35 IAC 728, Subpart D (35 IAC 728.103).

#### **60. WASTE ANALYSIS.**

1. The Permittee must test his waste or extract developed, using the test method identified in Appendix I of 40 CFR Part 268, or use knowledge of the waste, to determine if the waste is restricted from land disposal.
2. For any waste with treatment standards expressed as concentrations in the waste extract, the Permittee must test the treatment residues or an extract of such residues developed using the test method described in Appendix I of 40 CFR Part 268, to assure that the treatment residues or extract meet the applicable treatment standard.
3. If the treatment residues do not meet the treatment standards, or if the Permittee ships any restricted wastes to a different facility, the Permittee shall comply with the requirements applicable to generators in 35 IAC 728.107 and 728.150(a)(1).

#### **61. STORAGE RESTRICTIONS**

1. The Permittee shall not store hazardous wastes restricted from land disposal under 35 IAC Part 728, Subpart C unless such wastes are stored only in containers or tanks, and are stored solely for the purpose of the accumulation of such quantities as is necessary to facilitate proper recovery, treatment, or disposal, and: (1) each container is clearly marked to identify its contents and the date each period of accumulation begins; (2) each tank is clearly marked to identify its contents, the quantity of each hazardous waste received, and the date each period of accumulation begins, as required by 35 IAC 728.150.
2. The Permittee must comply with the operating record requirements of 35 IAC 724.173.

#### **62. NEW DETERMINATIONS OF PROHIBITED WASTES**

Wastes which are prohibited from land disposal under 35 IAC Part 728, Subpart C, or for which treatment standards have been established under 35 IAC 728, Subpart D, subsequent to the date of issuance of this permit, shall be subject to the conditions number 58 through 61 above.

## **SECTION III: CORRECTIVE ACTION**

### **A. INTRODUCTION**

1. In accordance with Section 3004 of RCRA and 35 IAC 724.201, the Permittee shall institute such corrective action as necessary to protect human health and the environment from all releases of hazardous wastes and hazardous constituents, listed in Appendix H of 35 IAC Part 721, from any solid waste management unit (SWMU) at its facility in Lakemoor, Illinois. The requirements set forth in this section ensure compliance with Section 30004(u) of RCRA and 35 Ill. Adm. Code 724.201.
2. Based upon a review of the available information, no SWMUs are currently present at the subject facility. However, there exists a possibility that the Permittee may, in the future, find or create SWMUs. Therefore, this section sets forth the procedures that the Permittee must follow if it finds or creates SWMUs in the future.

### **B. NOTIFICATION REQUIREMENTS FOR AN ASSESSMENT OF NEWLY-IDENTIFIED SOLID WASTE MANAGEMENT UNIT(S)**

1. The Permittee shall notify the Illinois EPA in writing of any newly-identified SWMU(s) discovered during the course of groundwater monitoring, field investigations, environmental audits, or other means, no later than sixty (60) calendar days after discovery. The notification shall provide the following information, as available:
  - a. The location of the newly-identified SWMU in relation to other SWMUs on a scaled map or drawing;
  - b. The type and past and present function of the unit;
  - c. The general dimensions, capacities, and structural description of the unit (available drawings and specifications provided);
  - d. The period during which the unit was operated;
  - e. The specifics on all materials, including but not limited to, wastes and hazardous constituents, that have been or are being managed at the SWMU, to the extent available; and
  - f. The results of any relevant available sampling and analysis which may aid in determining whether releases of hazardous wastes or hazardous constituents have occurred or are occurring from the unit.

2. If the submitted information demonstrates a potential for a release of hazardous waste or hazardous waste constituents from the newly identified SWMU, the Illinois EPA may request in writing, that the Permittee prepare a Solid Waste Management Unit (SWMU) Assessment Plan and a proposed schedule of implementation and completion of the Plan for any additional SWMU(s) discovered subsequent to the issuance of this Permit. Guidance for the development of a SWMU assessment plan will be provided in Illinois EPA's written request for such a plan.

This SWMU Assessment plan must propose investigations, including field investigations if necessary, to determine the release potential to specific environmental media for the newly-identified SWMU. The SWMU Assessment Plan must demonstrate that the sampling and analysis program, if applicable, is capable of yielding representative samples and must include parameters sufficient to identify migration of hazardous waste and hazardous constituents from the newly-discovered SWMU(s) to the environment.

3. The Illinois EPA shall approve, approve with conditions, or disapprove the Plan in writing. If the plan is approved, the Permittee shall begin to implement the Plan within forty-five (45) calendar days of receiving such written notification. If the Plan is disapproved, the Illinois EPA shall notify the Permittee in writing of the Plan's deficiencies and specify a due date for submittal of a revised plan.
4. The Permittee shall submit a report documenting the results of the approved SWMU Assessment Plan to the Illinois EPA in accordance with the schedule in the approved SWMU Assessment Plan. The SWMU Assessment Report shall describe all results obtained from the implementation of the approved SWMU Assessment Plan.
5. Additional investigation, and corrective measures as necessary, shall be carried out to ensure the requirements of 35 Ill. Adm. Code 724.201 are met. Further guidance regarding compliance with these requirements will be provided as necessary. The requirements of 35 Ill. Adm. Code 742 must also be met.
6. All Illinois EPA action on newly identified SWMUs are subject to the appeal provisions of Sections 39(a) and 40(a) of the Illinois Environmental Protection Act.

### C. FINANCIAL ASSURANCE

35 Ill. Adm. Code 724.201 requires that financial assurance be established for completing required corrective action at solid waste management units:

1. The Permittee shall demonstrate compliance with the financial assurance requirements of 35 Ill. Adm. Code 724.201 by providing documentation of financial assurance using a



mechanism specified in 35 Ill. Adm. Code 724.243, in at least the amount of the approved corrective action cost estimate. The words "completion of corrective action" shall be substituted for "closure and/or post-closure", as appropriate in the financial instrument specified in 35 Ill. Adm. Code 724.251. The Illinois EPA may accept financial assurance for completion of corrective action in combination with another financial mechanism that is acceptable under 35 Ill. Adm. Code 724.246 at its discretion.

2. The financial assurance requirements of 35 Ill. Adm. Code 724.201 must also be met for any investigative or corrective action efforts carried out in accordance with Subsection III.B above. Detailed cost estimates must be developed for any activities carried out under these Sections and must accompany any workplan/report submitted to Illinois EPA for review and approval. Appropriate documentation of financial assurance in at least the amount of the approved cost estimate must be submitted to Illinois EPA within 60 days after the cost estimates are approved.
3. Financial assurance for corrective action must be updated, as necessary, to reflect the current status of the RCRA corrective action program at this facility.

## ATTACHMENT A

### GENERAL INSPECTION SCHEDULE

ITEM	INSPECTION ELEMENTS – TYPES OF PROBLEMS	INSPECTION FREQUENCY
Access to Facility	<ul style="list-style-type: none"> <li>Doors closed</li> <li>Doors locked (when appropriate)</li> </ul>	Daily
Container Storage Area	<ul style="list-style-type: none"> <li>Arrangement of Containers as required in the permit,</li> <li>Adequate (30" min.) aisle spacing between rows of storage racks (marked aisles must be free of containers or other obstructions),</li> <li>Containers not stacked,</li> </ul>	Daily
Containers in Storage	<ul style="list-style-type: none"> <li>Damaged storage containers,</li> <li>Damaged pallets,</li> <li>Evidence of leaking containers, broken lamps (phosphor powder),</li> <li>Open containers,</li> <li>Containers are properly marked and labeled</li> <li>Volume of containers in storage does not exceed permitted storage volume.</li> </ul>	Daily
Common Area – Loading Dock	<ul style="list-style-type: none"> <li>Timely removal of containers (within 8 hours of their arrival)</li> </ul>	Once every 8 hours that containers are located in this area.
Warning Signs	Presence of warning signs	Weekly
Decontamination Equipment (shovel, broom, dust pan, central vacuum system, trisodium phosphate solution spray, extra shipping/storage containers, 55 gallon drum)	<ul style="list-style-type: none"> <li>Adequate Supply</li> <li>Deterioration, damage</li> <li>Operability of equipment</li> <li>Accessibility</li> </ul>	Weekly

ITEM	INSPECTION ELEMENTS – TYPES OF PROBLEMS	INSPECTION FREQUENCY
Internal / External Communications	<ul style="list-style-type: none"><li>• Operability</li><li>• Accessibility</li></ul>	Monthly
Fire Extinguishers	<ul style="list-style-type: none"><li>• Operability</li><li>• Evidence of Tampering</li><li>• Accessibility</li></ul>	Monthly
First Aid Equipment	<ul style="list-style-type: none"><li>• Adequate Supply</li><li>• Deterioration, damage</li><li>• Operability of Supplies</li><li>• Accessibility</li></ul>	Monthly
Personal Protective Equipment: Tyvek Coveralls and Boot covers, Rubber Gloves, Half face respirators with HEPA-Mercury vapor cartridges	<ul style="list-style-type: none"><li>• Adequate supply</li><li>• Deterioration, damage (e.g. cracks, tears, punctures, stiffness)</li><li>• Operability</li><li>• Accessibility</li></ul>	Monthly
Concrete Sealer on the Floor of the Container Storage Area	<ul style="list-style-type: none"><li>• Deterioration, damage, cracks, gaps</li></ul>	Annual

## ATTACHMENT B

### Closure Certification Statement

This statement is to be completed by both the responsible officer and by the registered professional engineer upon completion of closure. Submit one copy of the certification with original signatures and three additional copies.

The hazardous waste container storage unit (S01) at the facility described in this document has been closed in accordance with the specifications in the approved closure plan. I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

\_\_\_\_\_  
USEPA ID Number

\_\_\_\_\_  
Facility Name

\_\_\_\_\_  
Signature of Owner/Operator

\_\_\_\_\_  
Name and Title

\_\_\_\_\_  
Signature of Registered P.E.

\_\_\_\_\_  
Name of Registered P.E. and Illinois  
Registration Number

[P.E. Stamp]

\_\_\_\_\_  
Date

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**Attachment C**

**Closure Cost Estimate**

TABLE I.1  
CLOSURE COST ESTIMATE

Item	Unit Cost	Unit	Number of Units	Cost
Inventory lamp processing	\$0.50	per lamp	80,000	\$40,000
Storage area cleaning				
Labor	\$60	per hour	160	\$9,600
Other direct costs	\$1,000	lump sum	1	\$1,000
Container disposal	\$5,000	lump sum	1	\$5,000
Sampling and analysis				
Labor	\$60	per hour	16	\$960
Other direct costs	\$5,000	lump sum	1	\$5,000
Total				\$61,560
Contingency @15%				\$9,234
Total				\$70,794

## ATTACHMENT D

### REPORTING AND NOTIFICATION REQUIREMENTS

The reporting and notification requirements of each section of the RCRA permit are summarized below. This summary is provided to highlight the various reporting and notification requirements of this permit.

CONDITION	SUBMITTAL	DUE DATE
CONTAINER STORAGE		
I.I.2	Notify Regional Office of implementation of the Contingency Plan.	Within 24 hours of implementation of the Contingency Plan.
I.J.1	Notify Agency of intent to close the container storage area	At least 180 days prior to commencement of closure.
I.J.1	Submit decontamination and/or soil sampling and analysis plan for review.	At least 180 days prior to closure.
I.J.3	Submit application for modification of permit and closure / post-closure plan.	No later than 60 days after determining the container storage area cannot be clean closed.
I.J.5	Update Financial Assurance for closure and post-closure of the container storage area.	No later than 30 days after modification of the permit to include post-closure care.
I.J.6	Certification of Closure	Within 60 days of completing closure of the container storage area.
I.L.1	Revised Part A	On or before July 2, 2001
I.L.2	Analytical Test Results of Wastes	On or before July 2, 2001
I.L.3	Description of location(s) and tools used to open containers	On or before July 2, 2001
I.L.4	Copy of Inspection Log	On or before July 2, 2001
I.L.5	Revised Contingency Plan	On or before July 2, 2001
I.L.6	Documentation that copies of the Contingency Plan were sent to local agencies.	On or before July 2, 2001
I.L.7	Documentation of agreements and arrangements with local agencies.	On or before July 2, 2001

CONDITION	SUBMITTAL	DUE DATE
I.L.8	Documentation that the Training Director is trained in hazardous waste regulations.	On or before July 2, 2001
I.L.9	Minimum training that all job positions will receive.	On or before July 2, 2001
I.L.10	Revised Closure Cost Estimate	On or before July 2, 2001
I.L.11	Revised Financial Assurance Documents.	On or before July 2, 2001
STANDARD CONDITIONS		
II.6	Complete application for new permit	At least 180 days prior to expiration of this permit.
II.11	Information requested by Agency and copies of records required to be kept by this permit.	Within a reasonable time of the request.
II.14	Notify the Agency of planned physical alterations or additions	At least 15 days prior to any planned change.
II.15	Notify Agency of any changes that may result in noncompliance with this permit.	Within 15 days of the change.
II.16	Application for permit modification to transfer permit.	At least 90 days prior to the transfer date.
II.18	Submission of any information required in a compliance schedule.	Within 14 days after each schedule date.
II.19	Report to Agency any non-compliance that may endanger human health or the environment.	
	By telephone	Within 24 hours after discovery.
	In writing	Within 5 days after discovery.
II.20	Report all other instances of noncompliance	March 1 of each year along with Annual Report.
II.22	Manifest discrepancy report.	Within 15 days of receipt of waste (if discrepancy is not resolved)
II.22	Unmanifested waste report	Within 15 days of receipt of unmanifested waste.
II.28	Notify Agency in writing of expected	At least 4 weeks prior to



CONDITION	SUBMITTAL	DUE DATE
	receipt of hazardous waste from foreign source	receipt of waste.
II.41	Implementation of Contingency Plan	
	Notify appropriate state and local agencies with designated response roles.	As needed.
	Notify appropriate local officials.	Immediately if emergency coordinator's assessment indicates evacuation of local area is advisable.
	Notify the Agency (217/782-3637) or Illinois ESDA (217/782-7860) if emergency coordinator determines there has been a release, fire or explosion that could threaten human health or the environment, outside the facility.	Immediately after determination is made
	Notify Agency and appropriate state and local authorities, in writing that facility is in compliance with 35 IAC 724.156(h).	Prior to resuming operation in affected areas.
	Report to Agency details regarding incident that required implementation of contingency plan.	Within 15 days after event.
II.47	Annual Report required by 724.175.	March 1 of each year.
II.49	Permit modification to amend closure plan.	As required.
II.50	Notification of closure	At least 60 days prior to initiating closure.
II.54	Closure cost estimate adjusted for inflation.	60 days prior, or 30 days after anniversary date (depending on type of financial instrument used).
II.54	Revised closure cost estimate	As needed.
II.55	Change in financial assurance mechanism.	As needed.
II.56	Change in coverage for sudden or non-sudden liability insurance.	As needed.
II.57	Notification of commencement of	Within 10 days after

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CONDITION	SUBMITTAL	DUE DATE
	voluntary or involuntary bankruptcy proceedings	commencement of proceeding.
III.B.1	Notification of new SWMU.	Within 60 calendar days after discovery of SWMU.

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## ATTACHMENT E

### APPROVED PART B APPLICATION

	<u>PAGE</u>	<u>REVISION</u> <u>DATE</u>
<b>PART A APPLICATION</b>	Section A	5/8/00
<b>SECTION B - FACILITY DESCRIPTION</b>		
B-1 General Description	B1	6/26/99 (Rev 1)
B-2 Topographic Map	B-4	2/18/99 (Rev 0)
B-2a General Map Requirements	B0	10/9/00
B-2b Additional Map Requirements for Disposal Facilities	B-5 (NA)	2/18/99 (Rev 0)
B-3 Location Information	B-5	2/18/99 (Rev 0)
B-3a Seismic Standard	B-5	2/18/99 (Rev 0)
B-3b Floodplain Standard	B-5	2/18/99 (Rev 0)
B-3c Other Location Requirements	B-6	6/26/00 (Rev 1)
B-4 Traffic Information	B-6	6/26/00 (Rev 1)
B-5 Operating Record	B-6, B11, B12	6/26/00 (Rev 1)
B-6 Receiving Inspection	B-10	6/26/00
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Storage Rack Specifications	B22 to B24	No Date
Containment Pallets & Basins	B25	No Date
<b>SECTION C - WASTE ANALYSIS PLAN</b>		
C-1 CHEMICAL AND PHYSICAL ANALYSIS	C-1	10/16/00 (Rev 2)
C-1a Containerized Waste	C-2	6/26/00 (Rev 1)
C-2 WASTE ANALYSIS PLAN	C-3	6/26/00 (Rev 1)
C-2a Parameters and Rationale	C-3	6/26/00 (Rev 1)
C-2b Test Methods	C-3	6/26/00 (Rev 1)
C-2c Sampling Methods	C-4	6/19/00 (Rev 1)
C-2d Frequency of Analysis	C-4	6/19/00 (Rev 1)
C-2f Additional Requirements for Ignitable, Reactive or Incompatible Wastes	C-4	6/19/00 (Rev 1)
C-2g Waste Analysis Requirements for Land Disposal Ban	C-4	6/19/00 (Rev 1)

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C-3	Quality Control	C-4	6/19/00 (Rev 1)
C-4	Receiving Inspection	C-5	10/9/00
How to Pack & Ship Spent Lamps (DRAFT)		C6	no date
Shipping Form (DRAFT)		C7	no date
Recycle Bill of Lading (DRAFT)		C8	no date
Receiving / Inspection Form (DRAFT)		C9	no date
Certificate of Lamp Destruction (DRAFT)		C10	no date
Mercury Vapor Monitoring Log (DRAFT)		C11	no date
Report of Laboratory Analysis (DRAFT)		C11, C12	04/14/00

## SECTION D - PROCESS INFORMATION

D-1	Containers		
D-1a	Containers with Free Liquids (NA)	D1	06/26/00 (Rev 1)
D-1b	Containers Without Free Liquids	D1	06/26/00 (Rev 1)
	D-1b(1) Test for Free Liquids	D1	06/26/00 (Rev 1)
	D-1b(2) Description of Containers	D1-D6	06/26/00 (Rev 1)
			06/20/00 (Rev 0)
			06/26/00 (Rev 2)
	D-1b(3) Container Management Practices	D6, D7	06/26/00 (Rev 2)
	D-1b(4) Container Storage Area Drainage	D7	06/26/00 (Rev 2)

SECTION E - GROUNDWATER MONITORING (NA)	E1	06/19/00 (Rev 0)
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## SECTION F - PROCEDURES TO PREVENT HAZARDS

F-1	Security		06/26/00 (Rev 1)
F-1a	Security Procedures and Equipment	F1	06/26/00 (Rev 1)
	F-1a(1) 24-Hour Surveillance System	F1	06/26/00 (Rev 1)
	F-1a(2) Barrier and Means to Control Entry	F1	06/26/00 (Rev 1)
	F-1a(2)(a) Barrier	F1	06/26/00 (Rev 1)
	F-1a(2)(b) Means to Control Entry	F1	06/26/00 (Rev 1)
	F-1a(3) Warning Signs	F1	06/26/00 (Rev 1)
F-2	Inspection Schedule	F1	06/26/00 (Rev 1)
F-2a	General Inspection Requirements	F2	06/26/00 (Rev 1)
	F-2a(1) Types of Problems		06/26/00 (Rev 1)

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F-2a(2) Frequency of Inspections	F2	06/26/00 (Rev 1)
F-2b Specific Process Inspection Requirements	F2	06/26/00 (Rev 1)
F-2b(1) Container Inspection	F2	06/26/00 (Rev 1)
F-3 Preparedness and Prevention Requirements	F3	06/26/00 (Rev 1)
F-3a Equipment Requirements	F3	06/26/00 (Rev 1)
F-3a(1) Internal Communications	F3	06/26/00 (Rev 1)
F-3a(2) External Communications	F3	06/26/00 (Rev 1)
F-3a(3) Emergency Equipment	F3	06/26/00 (Rev 1)
F-3a(4) Water for Fire Control	F3	06/26/00 (Rev 1)
F-3b Aisle Space Requirements	F3	06/26/00 (Rev 1)
F-4 Preventive Procedures, Structures, and Equipment	F3	06/26/00 (Rev 1)
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F-4a Unloading Operations	F3	06/26/00 (Rev 1)
F-4b Run Off	F5	06/26/00 (Rev 1)
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F-4d Equipment and Power Failure	F6	06/26/00 (Rev 1)
F-4e Personnel Protective Equipment	F6	06/26/00 (Rev 1)
F-5 Prevention of Reaction of Ignitable, Reactive and Incompatible Wastes (NA)	F6	06/26/00 (Rev 1)
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<b>SECTION G - CONTINGENCY PLAN</b>		
G-1 General Information	G1	06/26/00 (Rev 2)
G-2 Emergency Coordinator	G2, G3	06/26/00 (Rev 2)
G-3 Implementation	G3, G4, G5	06/26/00 (Rev 2)
G-4 Emergency Response Procedures	G6	06/26/00 (Rev 2)
G-4a Notification	G7	06/26/00 (Rev 2)
G-4b Identification of Hazardous Materials	G7	06/26/00 (Rev 2)
G-4c Assessment	G7	06/26/00 (Rev 2)
G-4d Control Procedures	G8, G6	6/05/91

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G-4e Prevention of Recurrence or Spread of Fires, Explosions or Releases	G8	06/26/00 (Rev 2)
G-4f Storage and Treatment of Released Material	G8	06/26/00 (Rev 2)
G-4g Incompatible Waste	G8	06/26/00 (Rev 2)
G-4h Post-Emergency Equipment Maintenance	G8	06/26/00 (Rev 2)
G-4i Container Spills and Leakage	G8	06/26/00 (Rev 2)
G-5 Emergency Equipment	G9	06/26/00 (Rev 2)
G-6 Coordination Agreement Requirements	G9	06/26/00 (Rev 2)
G-7 Evacuation Plan	G9	06/26/00 (Rev 2)
G-8 Required Reports	G10	06/26/00 (Rev 2)
Letter from Fox Lake Fire Dept.	G14	04/28/00 Received 06/27/00
Inspection Report from Village of Fox Lake	G15	06/22/99

## **SECTION H - PERSONNEL TRAINING**

H-1 Outline of the Training Program	H1	06/20/00 (Rev 1)
H-1a Job Title/Job Description	H1	06/20/00 (Rev 1)
H-1b Training Content, Frequency and Techniques	H1	06/20/00 (Rev 1)
H-1c Training Director	H2	06/20/00 (Rev 1)
H-1d Relevance of Training to Job Position	H2	06/20/00 (Rev 1)
H-1e Training for Emergency Response	H2	06/20/00 (Rev 1)
H-2 Implementation of Training Program	H2	06/20/00 (Rev 1)
Facility Specific Hazard Awareness Training Program	H3, H4	06/20/00 (Rev 1)

## **SECTION I - CLOSURE AND POST-CLOSURE REQUIREMENTS**

I-1 Closure Plan		
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I-1b Partial Closure Activities	I2	06/20/00 (Rev 0)

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I-1c Maximum Waste Inventory	I2	06/20/00 (Rev 0)
I-1d Inventory Removal, Disposal or Decontamination of Equipment, Structures and Soils	I2, I3	06/20/00 (Rev 0)
I-1e Closure of Disposal Units (NA)	I3	06/20/00 (Rev 0)
I-1f Schedule for Closure	I3	06/20/00 (Rev 0)
I-1g Extensions of Closure Time (NA)	I3	06/20/00 (Rev 0)
I-2 Post-Closure Plan (NA)	I4	06/20/00 (Rev 0)
I-3 Notice in Deed and Certification	I4	06/20/00 (Rev 0)
I-4 Closure Cost Estimate	I4	06/20/00 (Rev 0)
I-5 Financial Assurance Mechanism for Closure	I4	06/20/00 (Rev 0)
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- Appendix 1: Village of Lakemoor's Certification of Siting Approval, and ordinance approving a conditional use permit for the Fluorecycle site.
- Appendix 2: Manufacturer's Technical Literature
- Appendix 3: IDNR, ISWS's non-floodplain area determination letter
- Appendix 4: Preliminary Operating Logs
- Appendix 5: Pollution Liability Insurance Certificate
- Appendix 6: Prior Conduct Certifications
- Appendix 7: Property owner letter certifying that the facility has never been used as a SWMU
- Appendix 8: Property lease and ownership information



0974455001  
Fluorecycle  
RCRA Log No. B-168

June 2002  
Page E-7 of E-7

### **ADDITIONAL SUBMITTALS**

The following two submittals are also considered part of the permit application:

- The letter from ESI dated May 3, 2001 and received May 4, 2001:  
Comments on the Draft Permit
- The letter from ESI dated November 21, 2001 and received November 26, 2001:  
Compliance Schedule Items

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ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276

THOMAS V. SKINNER, DIRECTOR

217/524-3300

March 19, 2001

CERTIFIED MAIL

7099 3400 0002 1429 2291

7099 3400 0002 1429 2321

OPERATOR

Fluorecycle, Inc.

27780 W. Concrete Drive, Unit A  
Ingleside, Illinois 60041

OWNER

MGDSF Partnership

2528 South 27<sup>th</sup> Ave.  
Broadview, Illinois 60155

Re: 0974455001 -- Lake County

Fluorecycle, Inc.

ILR000049833

RCRA Log 168

Administrative Record File

RECEIVED  
MAR 23 2001  
MNOHVI PERMIT SECTION - WMB  
Waste, Pesticides & Toxics Division  
U.S. EPA - REGION 5

Dear Messrs. Worth and Murphy:

Enclosed is a DRAFT RCRA Hazardous Waste Management Part B permit and fact sheet. The draft permit is based on the administrative record contained in the Illinois EPA's files. The contents of the administrative record are described in 35 Illinois Administrative Code (I.A.C.) Section 705.144. Read these documents carefully. Failure to meet any portion of the permit could result in civil and/or criminal penalties.

Under the provisions of 35 Illinois Adm. Code 705.141(d), the draft permit and administrative record must be publicly noticed and made available for public comment. The Illinois EPA must also provide an opportunity for a public hearing. Copies of the draft decision and fact sheet are available for review at the McHenry Nunda Public Library at 813 W. Route 120 in McHenry, Illinois. The Illinois EPA has not scheduled a public hearing at the current time. However, any interested party may request a public hearing. The public comment period will close on May 5, 2001.

During the comment period, the applicant or any interested party may submit comments to the Illinois EPA on the draft permit. At the close of the comment period, the Agency will prepare a response to significant comments. Comments on the draft permit may be submitted to Mara McGinnis, RCRA Public Involvement Coordinator.

The Illinois EPA will issue a final permit after the close of the public comment period unless the Illinois EPA decides to reverse the tentative decision. The appeal process and limitations are addressed in 35 Illinois Adm. Code 705.212.

GEORGE H. RYAN, GOVERNOR

Page 2

If you have any comments or questions regarding the above, please contact Rob Watson at 217/524-3265.

Sincerely,

A handwritten signature in cursive script, appearing to read "Joyce L. Munie".

Joyce L. Munie, P.E.  
Manager, Permit Section  
Bureau of Land

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Attachments: Fact Sheet and Draft Hazardous Waste Management Permit

cc: USEPA Region V

# **FACT SHEET**

## **DRAFT RCRA Permit**

### **FLUORECYCLE in LAKEMOOR, ILLINOIS**

**ILR 000 049 833**

**STATE ID # 0974455001**

**RCRA Permit LOG NO. B-168**

This fact sheet has been prepared pursuant to the requirements of Title 35 Illinois Administrative Code (35 IAC) Section 705.143. The fact sheet is intended to be a brief summary of the principal facts and significant factual, legal, methodological, and policy questions considered in preparing a draft RCRA permit. Pursuant to 35 IAC 705.143(a), this fact sheet is sent to the applicant, the public repository established by the Illinois EPA, and any person who requests it.

#### **I. INTRODUCTION**

The draft RCRA permit for Fluorecycle contains all of the standard conditions required by 35 IAC Parts 702, 703, and 724; and the applicable conditions of 35 IAC Part 724 for the storage of hazardous waste in containers. The Fluorecycle facility in Lakemoor Illinois is a new RCRA facility that will be located at an existing building in Lakemoor, Illinois. Although the facility is located in Lakemoor, the mailing address is 27780 W. Concrete Drive, Unit A in Ingleside, Illinois.

Fluorecycle submitted the permit application on March 5, 1999. The Agency issued several sets of comments on the application in 1999 and 2000. Fluorecycle provided revised pages to the application in response to the Agency comments. On June 27, 2000 Fluorecycle submitted a completely new application in response to a set of comments from the Illinois EPA. The draft RCRA permit is based upon the June 27, 2000 application and the revised pages provided by Fluorecycle on October 24, 2000.

#### **II. DESCRIPTION OF FACILITY**

##### **A. General**

Fluorecycle operates a mercury reclamation - recycling operation in Lakemoor, Illinois. The facility processes fluorescent and high intensity discharge (HID) lamps (e.g. lamps) to reclaim/recover the mercury as well as the glass and metals in the wastes. The lamps are hazardous wastes (D009) due to the mercury in them. The facility is located in a 4,000 square foot addition to the existing Paramount Electric Supply building. The hazardous wastes (lamps) that are received at the site will be stored in a 30 x 30 square foot area within the Fluorecycle facility prior to being recycled. Most of the lamps will

be received whole and unbroken in cardboard boxes. However, the facility may also receive crushed lamps in 55-gallon steel drums.

B. Site Description

Fluorecycle is located in a light industrial park in Lakemoor, Illinois. The land surrounding the industrial park is agricultural.

**III. HAZARDOUS WASTE MANAGEMENT ACTIVITIES**

A. WASTE TYPE

This draft permit allows Fluorecycle to receive and store only those fluorescent and HID lamps (lamps) that are hazardous wastes (D009) due to the mercury in them. Fluorecycle has expressed a desire to receive and store incandescent light bulbs and other compatible wastes. However, Sections B, C, D, F, G, and I of the application did not completely identify these other types of wastes, or adequately describe how they would be managed at the facility. Therefore, in order to insure that wastes are safely managed in accordance with the regulations, the draft permit limits the type of waste that Fluorecycle can receive.

If the application is adequately revised during the comment period to describe these additional waste types and how they would be managed in accordance with the regulations, the final RCRA permit may allow for other types of spent lamps or light bulbs to be received and stored at the facility.

B. STORAGE

This draft permit allows Fluorecycle to store a maximum of 2,880 cubic feet of wastes (lamps) in the container storage area at any one time. In addition, wastes may only be stored on the storage racks within the 30 x 30 square foot hazardous waste storage area as indicated on Figure B.2 in the permit application. The draft permit prohibits the storage of containers of wastes, or pallets of containers, on the floor within the storage area.

Fluorecycle's application indicates that the facility wants to store a significantly larger volume of wastes (10,000 cubic feet) on pallets and in specialty containers on the floor within the RCRA hazardous waste storage area. However, the application did not identify the storage arrangement (including aisle spacing) or otherwise describe how this larger volume would be stored in the area. Therefore, in order to insure that wastes are safely managed in accordance with the regulations, the draft permit limits the

storage volume and the way containers of wastes may be arranged in the storage area at the Fluorecycle facility.

If the application is adequately revised during the comment period to describe the arrangement (and aisle spacing) for a larger volume of containers in the storage area, and describe how this increased volume would be managed in accordance with the regulations, other storage arrangements and an increased storage volume may be allowed in the final RCRA permit.

C. RECYCLING OPERATION

The recycling of lamps at the Fluorecycle facility is exempt from the RCRA permitting requirements because the process recovers commercial grade mercury that is shipped off-site and used in place of a raw material. Environmental and worker safety regulations other than RCRA apply to the recycling process equipment.

The lamps that are received at Fluorecycle are crushed and the components that make up the wastes are separated. Most of the mercury in a fluorescent lamp is attached to the phosphor powder in the lamp. This powder is collected and the mercury is extracted from it. The entire recycling process is operated under negative air pressure. The air that is collected goes through a filter system before it is released back to the atmosphere. In addition, the air in the building is sampled and tested for mercury several times each day.

D. CORRECTIVE ACTION

RCRA permitted facilities must perform corrective action when a release of hazardous constituents occurs at their facility. These areas are designated as solid waste management units (SWMUs). No SWMUs have been identified at the facility. However, the draft permit includes a section on Corrective Action in the event that a SWMU is discovered, or created, in the future.

E. STANDARD PERMIT CONDITIONS

Standard Permit Conditions 1 to 62 in the draft permit are regulatory requirements of 35 Ill. Adm. Code, Parts 702, 703 and 724. These conditions are of a general nature and are applicable to all Hazardous Waste Management facilities regulated pursuant to an Illinois EPA RCRA permit. These conditions include the effectiveness of the permit, permit actions, severability, permit expiration, monitoring and retention of records, transfer of permits, and compliance schedules.

#### **IV. CONSIDERED PERMIT ACTIONS OTHER THAN RCRA**

##### **A. Air**

The air emissions from a hazardous waste management facility are regulated under RCRA, the Clean Air Act (CAA), Illinois' Environmental Protection Act and State regulations at Title 35: Environmental Protection, Subtitle B: Air Pollution. Under these regulations, the facility is required to obtain a permit to install or operate any process that is, or may be, a source of air pollutants. The recycling operation at Fluorecycle permitted by the Illinois EPA, Bureau of Air.

##### **B. Water**

A discharge of any waste waters from a hazardous waste management facility into the waters of the State, is required to have a National Pollutant Discharge Elimination System (NPDES) Permit issued by the Agency under Section 39(b) of the Environmental Protection Act. Operations at the Fluorecycle facility do not discharge wastewaters to waters of the state. Therefore, the facility does not have a NPDES permit.

#### **V. PROCEDURES FOR REACHING A FINAL DECISION**

Pursuant to 35 IAC 705.162(a)(2), the public is given forty-five (45) days to review the application and comment on the draft permit conditions prior to Illinois EPA taking any final permitting action on the application for this RCRA hazardous waste management permit.

Copies of the draft permit and fact sheet are available for review at the McHenry Nunda Public Library 813 W. Route 120, in McHenry, Illinois. The comment period will begin on March 21, 2001. The comment period will end on May 5, 2001. When the Agency makes its final permit decision, notice will be given to the applicant and each person who has submitted written comments or requested notice of the final permit decision. The permit will become effective thirty-five (35) days after service of notice of the decision, unless it is appealed, or at a later date if stated in the Permit.

Any interested person may submit written comments on the draft permit, or request a public hearing, by contacting:

Mara McGinnis, Office of Community Relations, # 33  
Illinois Environmental Protection Agency  
1021 North Grand Avenue East  
Post Office Box 19276  
Springfield, Illinois 62794-9276  
(217) 524-3288

The administrative record can be made available for public inspection at the Illinois EPA Springfield headquarters from 8:30 a.m. to 5:00 p.m., Monday through Friday. The administrative record contains the permit application, fact sheet, and other supporting documents and correspondence submitted to the Illinois EPA. Review of the administrative record must be scheduled in advance by contacting Ms. McGinnis at the above address.

In response to requests received during the comment period or at the discretion of the Illinois EPA, a public hearing may be held to clarify one or more issues concerning the permit application. A request for a public hearing must be in writing and shall state the nature of the issues proposed to be raised in the hearing. Public notice will be issued forty five (45) days before any public hearing.

For further information, please contact Mara McGinnis, at the above address, by telephone at (217) 524-3288, or e-mail at [Mara.McGinnis@epa.state.il.us](mailto:Mara.McGinnis@epa.state.il.us).





## ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276

THOMAS V. SKINNER, DIRECTOR

### ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

#### HAZARDOUS WASTE MANAGEMENT RCRA PART B PERMIT

IEPA # 0974455001 -- Lake County  
USEPA # ILR000049833  
Fluorecycle, Inc.  
Permit Log No. B-168  
RCRA Administrative Record File

Issue Date:  
Effective Date:  
Expiration Date:

#### OPERATOR

Fluorecycle, Inc.  
27780 W. Concrete Drive, Unit A  
Ingleside, Illinois 60041

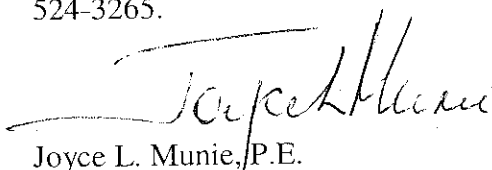
#### OWNER

MGDSF Partnership  
2528 South 27<sup>th</sup> Ave.  
Broadview, Illinois 60155

A DRAFT Part B permit is hereby proposed pursuant to the Resource Conservation and Recovery Act, Illinois Environmental Protection Act, and Title 35 Illinois Administrative Code (I.A.C.) parts 702, 703, 705, and 720 through 729 to Fluorecycle to construct, maintain and operate a waste management facility involved in the storage of hazardous waste in containers. Fluorecycle, Inc. is located in Lakemoor Illinois. Although the facility is physically located in Lakemoor, the address for the facility is 27780 W. Concrete Drive, Ingleside, Illinois.

This permit consists of the conditions contained herein (including those in any attachments and appendices) and applicable regulations contained in the Illinois Environmental Protection Act and Title 35 I.A.C. Parts 702, 703, 705 and 720 through 729 and 733 in effect on the effective date of this permit. The Environmental Protection Act (Ill. Rev. Stat., Chapter 111 1/2, Section 1039) grants the Illinois Environmental Protection Agency the authority to impose conditions on permits that are issued. This permit contains 44 pages including Attachments A through E.

If you have any questions regarding this DRAFT permit, please contact Rob Watson at 524-3265.

  
Joyce L. Munie, P.E.  
Manager, Permit Section  
Bureau of Land

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GEORGE H. RYAN, GOVERNOR

**RCRA Hazardous Waste Management Permit  
Fluorecycle  
0974455001 -- Lake County  
ILR000049833  
Log No. B-168**

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Attachment "D" - Reporting and Notification Requirements

Attachment "E" - Identification of the Approved Permit Application

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## DESCRIPTION OF FACILITY

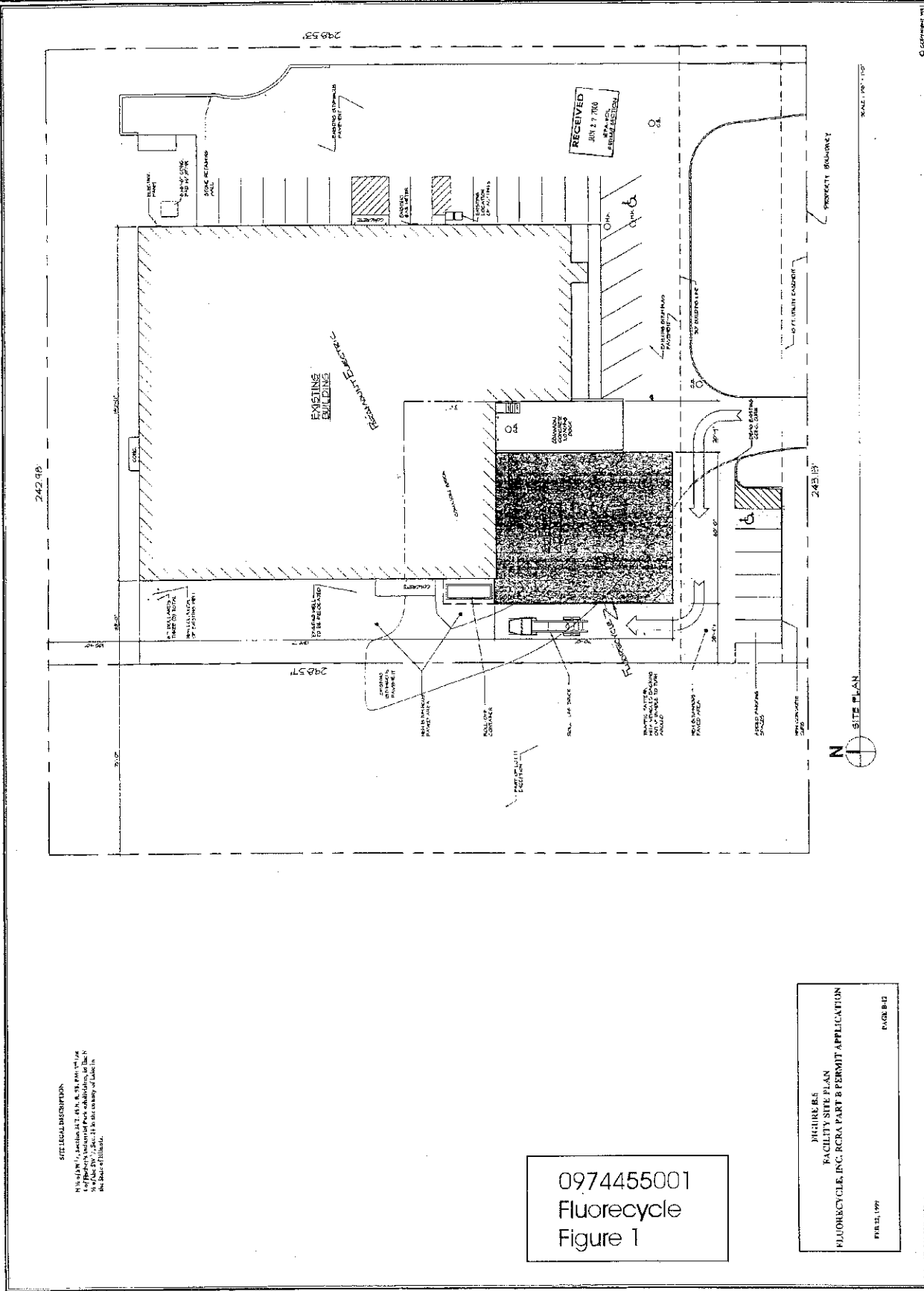
Fluorecycle is a hazardous waste storage facility located in Lakemoor, Illinois. The facility processes used fluorescent and high intensity discharge (HID) lamps (e.g. lamps) and reclaims / recovers the mercury, glass and metals in these wastes. The lamps are considered hazardous waste (D009) due to the mercury in them.

This RCRA Part B permit is for the storage of hazardous waste prior to the recycling process. The facility can receive mercury containing lamps from a wide variety of generators. Most of the lamps will be received whole and unbroken. However, the facility may also receive 55-gallon drums of crushed lamps.

Figure 1 of this permit is the site plan for the facility. Figure 2 of the permit shows the location of the proposed hazardous waste container storage area. These figures also show the location of the common dock area where shipments of wastes will be off-loaded from the trucks used to transport them to the facility. The permittee is prohibited from conducting waste management activities in areas that are not specifically identified in the approved permit application or this permit.

The legal description for the permitted facility (the entire Lot F) is the N ½ of SW ¼ Section 34 T. 45 N. R. 9E. PM: 3<sup>rd</sup> Lot 4 of Fischer's Industrial Park subdivision, in the N ½ of the SW ¼ Sec. 34 in the county of Lake in the State of Illinois.

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## **Section I - CONTAINERS**

### **A. SUMMARY**

All wastes received from off-site generators must be held in one of the containers specified in the approved permit application. Whole, unbroken lamps will be held in containers made of cardboard and fiberboard. The size of the containers will vary based on the size of the lamps they hold. 55-gallon steel drums will be used to hold crushed lamps. All containers must be DOT-approved for the materials that they contain. Both new and used containers can be received from off-site generators.

### **B. WASTE IDENTIFICATION**

1. The permittee is prohibited from receiving or storing wastes that are not mercury-containing lamps identified as hazardous waste D009 and defined in the Universal Waste Regulations at 35 Il. Adm. Code 733.106. Mercury-containing lamps include, but are not limited to, fluorescent lamps and high intensity discharge (HID) lamps (e.g. lamps). Incandescent light bulbs (a nonhazardous waste), ballasts, batteries, thermostats, compatible wastes that are not specifically identified in the application, or other types of waste shall not be received at the facility or placed in the RCRA storage area. This RCRA permit may need to be modified in accordance with 35 Il. Adm. Code 703 should the permittee wish to receive and store other types of waste in the future.
2. The permittee shall not receive or store wastes that contain free liquids at the Fluorecycle facility.
3. The Permittee shall not receive or store ignitable or reactive waste at the Fluorecycle facility.
4. The Permittee shall not receive or store incompatible wastes, or incompatible wastes and materials, at the Fluorecycle facility.

### **C. CONTAINER STORAGE AREA**

1. The maximum volume of containerized waste that can be placed/stored in the container storage area at any one time shall not exceed 2,880 cubic feet.
2. Containers of wastes shall only be stored on the storage racks identified in the 30 x 30 square foot storage area identified in Figure B.2 of the approved permit application. Containers of wastes or pallets of containers shall not be stored on the floor within the storage area.

3. The permittee shall perform a complete annual inspection of the storage area floor's surface coating / concrete sealer. The permittee shall perform maintenance on the surface coating / concrete sealer as necessary to insure the integrity of the coating.

**D. CONDITION OF CONTAINERS**

1. If a container holding hazardous waste is not in good condition (e.g., severe rusting, apparent structural defects) or if it begins to leak, the Permittee must transfer the hazardous waste from this container to a container that is in good condition or manage the waste in accordance with the Approved Permit Application.
2. Any transfer of waste that is required to comply with Condition I.D.1 must be recorded in the facility's operating record.
3. Packaging of all wastes accepted for storage in the container storage area shall meet the requirements of 49 CFR 172, 178 and 179 and all applicable D.O.T. and Universal Waste regulations at 35 IAC 733. All containers must be marked and placarded in accordance with 49 CFR 172 or 35 IAC 733.
4. The contents of each container shall be clearly identified on the top or side of the container in accordance with 49 CFR 172 prior to being placed in the container storage area.

**E. COMPATIBILITY OF WASTE WITH CONTAINERS**

1. The Permittee must use a container made of or lined with material that will not react with, and is otherwise compatible with, the hazardous waste to be stored, so that the ability of the container to contain the waste is not impaired.

**F. MANAGEMENT OF CONTAINERS**

The Permittee shall comply with the following container management practices:

1. A container holding hazardous waste must always be closed during storage, except when it is necessary to add or remove waste.
2. A container holding hazardous waste must not be opened, handled, or stored in a manner that may rupture the container or cause it to leak.
3. Containers and pallets of containers shall only be placed on the storage rack shelves in the RCRA container storage area. Containers, or pallets of containers, shall not be stacked on top of each other.

4. Wastes shall only be received at the site in the common loading dock area (common area) identified on Figures B.2 and B.6 of the approved permit application. Wastes shall only be located in this area long enough to unload the truck that was used to ship the wastes and perform the waste receipt inspection procedures described in Section C.4a of the approved permit application, but in no case shall wastes be located in this area for more than 8 hours. Storage of wastes in this area is prohibited.

## **G. GENERAL OPERATING REQUIREMENTS**

1. The Permittee shall operate the container storage area in accordance with the Approved Permit Application, subject to the conditions of this permit.
2. All hazardous and non-hazardous special wastes generated by this facility which require further treatment or disposal off-site must be transported to the receiving facility in accordance with the applicable regulations in 35 IAC, Parts 709, 722, 723, 807 and 809, and the Agency's special waste hauling and manifests system.
3. The Permittee shall comply with the applicable Land Disposal Restrictions at 35 Il. Adm. Code Part 728 for all wastes (including components of the crushed lamps, glass, plastic, metal, phosphor powder) shipped off-site for further treatment, storage, or disposal in a landfill.
4. Changes to the permitted facility (the entire Lot F) may constitute a cause for modification of the RCRA permit pursuant to 35 IAC 703 Subpart G. Changes to the facility that do not involve waste management would be considered Class 1 modifications. The application for these types of Class 1 modifications must contain sufficient information to demonstrate that the hazardous waste management operations (including emergency response and means of egress) will not be impacted by the proposed modification.

## **H. INSPECTION**

1. The Permittee shall inspect the containers, container storage area, and emergency equipment in accordance with the inspection schedule, specified in Attachment A of this permit. All records of inspections at the facility shall be maintained in the facility operating record.
2. Inspection records required by Condition I.H.1 above, must include the date and time of each inspection, the name of the inspector, notation of the observations made, and the nature and date of any repairs or remedial actions.



## **I. CONTINGENCY PLAN**

1. In addition to the conditions listed in the application, the permittee shall implement the Contingency Plan anytime one or more fluorescent lamps are accidentally broken.
2. The Agency's Bureau of Land Regional Office in Des Plaines shall be notified verbally and in writing within 24 hours of implementing the contingency plan.
3. The permittee shall have and properly maintain a half-face respirator with approved HEPA/mercury cartridges for each employee at Fluorecycle. The permittee shall also have and maintain two additional respirators with HEPA/mercury cartridges for use by emergency response personnel.

## **J. CLOSURE**

At closure, at a minimum, all hazardous waste and hazardous waste residues and constituents must be removed from the container storage area. Remaining wastes, liners, bases, soil and groundwater containing or contaminated with hazardous waste, hazardous waste residue or hazardous constituents must be decontaminated or removed. Closure of the container storage area shall be carried out in accordance with the closure plan in the approved permit application, as modified below:

1. The Permittee shall notify the Illinois EPA Bureau of Land Permit Section in writing of its intent to close the container storage area at least 180 days prior to the date closure is expected to begin. Along with this notification, the Permittee shall submit a sampling and analysis plan to be used in demonstrating the container storage area has been properly decontaminated. This plan must be approved by the Illinois EPA Bureau of Land Permit Section in writing prior to being implemented. Illinois EPA review of this plan will be subject to the permit appeal provisions contained in Sections 39(a) and 40(a) of the Illinois Environmental Protection Act. The response from the Illinois EPA will approve and establish:
  - a. The sampling and decontamination plan;
  - b. What contaminants must be analyzed for;
  - c. Analytical requirements (SW-846 Methods should be utilized);
  - d. The contaminant level at which decontamination or removal is considered complete.
2. The Permittee shall steam clean and triple rinse the storage racks and concrete floor of the container storage area identified in Condition I.C.2 of this permit. All sweepings, washwater

and rinsate generated during the closure of the unit shall be managed as a hazardous waste, unless it can be shown to be exempt under 35 IAC Part 721. An independent, registered, professional engineer must certify that the surface has no cracks, gaps, or other defects which would allow waste to migrate through to the underlying soil or an approved sampling plan must be used to establish clean closure.

3. The Permittee shall provide post-closure care in accordance with 35 IAC Part 724 for the container storage area if all of the hazardous wastes or contaminated material or media cannot be practicably removed or decontaminated in accordance with the closure requirements outlined in the permit and in the approved closure plan. If it is determined that the closure requirements cannot be met and post-closure care is required, this Permit must be modified to require post-closure care in accordance with 35 IAC, Subtitle G, Part 724, Subparts G and H.
4. Should post-closure care, as described above, become necessary, the Permittee shall submit an application for modification to this permit, including an amended closure and post-closure care plan for this unit, within thirty (30) days following discovery that clean closure cannot be accomplished. If a determination is made to not pursue clean closure prior to the implementation of the closure plan, the modification request shall be made no later than sixty (60) days after the determination is made.
5. Financial assurance for closure and post-closure of the container storage area, if required, shall be provided within thirty (30) days following modification of the permit.
6. Within sixty (60) days after completing closure of the container storage area, the Permittee shall submit certification to the Agency that the unit has been closed in accordance with the approved closure plan.

The closure certification form in Attachment B to this permit or a certification with identical wording must be used. Signatures must meet the requirements of 35 Ill. Adm. Code Section 702.126. The independent engineer (registered in the State of Illinois) should be present at all critical, major points (activities) during the closure. These might include decontamination, soil sampling, soil removal, backfilling, final cover placement, etc. The frequency of inspections by the independent engineer must be sufficient to determine the adequacy of each critical activity. Financial assurance must be maintained for the area(s) until the Agency approves the closure certification for the unit. The Agency's review of closure certification for partial or final closure will be conducted in accordance with 35 IAC 724.243.

A Closure Documentation Report is to be submitted with the closure certification which includes the following items, if applicable:

- a. The volume of waste and waste residue removed, including wastes resulting from decontamination activities.
  - b. A description of the method of waste handling and transport.
  - c. Copies of the waste manifests.
  - c. A description of the sampling and analytical methods used including sample preservation methods and chain-of-custody information.
  - d. A chronological summary of closure activities and the cost involved.
  - e. Tests performed, methods and results.
  - f. Color photographs of closure activities that document conditions before, during and after closure.
  - g. A scale drawing of all excavated or decontaminated areas and sample locations.
7. To avoid creating another regulated storage unit during closure, obtain any necessary permits for waste disposal prior to initiating excavation activities. If it is necessary to store excavated hazardous waste on-site prior to off-site disposal, do so only in containers or tanks for less than ninety (90) days or in the case of a partial closure, a properly permitted unit. Do not create regulated waste pile units by storing the excavated hazardous waste in piles. The ninety (90) day accumulation time exemption (35 IAC 722.134) only applies to containers and tanks.
  8. Under the provisions of 29 CFR 1910 (51 FR 15,654, December 19, 1986), cleanup operations must meet the applicable requirements of OSHA's Hazardous Waste Operations and Emergency Response standard. These requirements include hazard communication, medical surveillance, health and safety programs, air monitoring, decontamination and training. General site workers engaged in activities that expose or potentially expose them to hazardous substances must receive a minimum of 40 hours of safety and health training off site plus a minimum of three days of actual field experience under the direct supervision of a trained experienced supervisor. Managers and supervisors at the cleanup site must have at least an additional eight hours of specialized training on managing hazardous waste operations.
  9. If the Agency determines that implementation of this closure plan fails to satisfy the requirements of 35 Ill. Adm. Code, Section 724.211, the Agency reserves the right to amend

the closure plan. Revisions of closure plans are subject to the appeal provisions of Section 40 of the Illinois Environmental Protection Act.

10. Please be advised that the requirements of the Responsible Property Transfer Act (Public Act 85-1228) may apply to your facility due to the management of RCRA hazardous waste. In addition, please be advised that if you store or treat on-site generated hazardous waste in containers or tanks pursuant to 35 IAC 722.134, those units are subject to the closure requirements identified in 35 IAC 722.134(a)(1).

## **K     Financial Assurance**

1. The financial assurance documents required by 35 Ill. Adm. Code 724.243 shall be in place at least 60 days before wastes are stored in the RCRA container storage area.
2. Pursuant to 35 Ill. Adm. Code 724.242(b), during the active life of the facility, the permittee shall adjust the closure cost estimate for inflation within 60 days prior to the anniversary date of the establishment of the financial instrument.

## **L.   COMPLIANCE SCHEDULE**

On or before July 2, 2001, the permittee shall provide the following to the Illinois EPA Bureau of Land Permit Section:

1. A revised Part A RCRA permit application that identifies all other permits that the facility is required to have. At a minimum, Section X of the Part A must be revised to include the permit issued by Illinois EPA's Bureau of Air.
2. Information formatted as revised pages to Section C of the permit application that include the following information:
  - a. The components in a "standard" 4-foot fluorescent lamp and a HID lamp and the approximate percentages at which they are present. The permittee shall identify any "nonstandard" components that may be present in the waste.
  - b. The total and TCLP concentrations of mercury in a "standard" 4 foot fluorescent lamp and a HID lamp.
3. Information formatted as revised pages to Section F of the permit application that:
  - a. Describe the tools and procedures used to open / close containers and any equipment used to add or remove wastes from containers.

- b. Identify all places where wastes are removed from, or added to, containers and clearly identify these locations on a revised Figure B.2.
4. A copy of the inspection log that will be used to record each inspection and repair. The log must clearly identify all of the information that will be recorded each time an inspection is performed or a repair is made. (This should also be in the form of revised pages to Section F of the permit application.)
5. A revised Contingency Plan that includes the following:
  - a. A revised copy of Figure B.2 of the approved permit application, that indicates the storage arrangement of all hazardous wastes, all access points, the locations of all communications equipment, and the locations of all emergency equipment referenced in Section G-4, Table G-2 and the conditions in this permit. (The figure may need to be renamed for inclusion into the Contingency Plan).
  - b. Revise Sections G-1 and G-5 that refer to Figure B.2 and the information shown on it.
  - c. Revise Sections G-3 and G-4 and F-2a(2) to consistently identify the amount of mercury vapor in the facility's air that is safe to breath without a respirator.
  - d. Revise Section G-4a to list the local state and federal agencies that will be notified in the event of an incident at the facility. Provide the name, address and phone number for each one.
6. Documentation (e.g. a copy of the cover letter) that copies of the contingency plan have been sent to local police and fire departments, hospitals, contractors, and state and local emergency response teams to familiarize them with the facility and actions needed in case of emergency.
7. Documentation of the agreements and arrangements made with local police and fire departments, hospitals, contractors, and state and local emergency response teams to familiarize them with the facility and actions needed in case of emergency. If necessary, documentation must be provided that any agency identified in 35 Ill. Adm. Code 724.153(b) declined to enter an agreement or arrangement.
8. Documentation that the Training Director has received training in the RCRA hazardous waste regulations. The permittee shall also provide revised wording for Section H-1c of the application that specifically references this documentation.
9. Revised pages to Section H-1d of the permit application that clearly identifies the minimum training that all job positions will receive. This training must include procedures for using, inspecting, repairing, and replacing facility emergency and monitoring equipment, the use of communications equipment, and responses to fires or releases.

10. The following financial assurance documents:

- a. A copy of the performance bond, or other financial mechanism as specified in 35 IAC Part 724, which contains sufficient funds to meet the financial assurance requirements for closure at 35 IAC 724.243. The performance bond shall be issued for at least \$70,794; the amount needed to cover the site closure costs identified in Section I and Attachment C of this permit.
- b. If the amount required to close the site when the entire permitted storage volume is filled with containers of crushed lamps exceeds \$70,794, the financial mechanism must, at a minimum, be issued for that amount.
- c. Pursuant to 35 Ill. Adm. Code, Section 724.243(c)(3), a standby trust fund must be established by the permittee and a signed duplicate submitted to the Illinois EPA with a performance bond.

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## SECTION II STANDARD CONDITIONS

### GENERAL REQUIREMENTS

1. **EFFECT OF PERMIT.** The existence of a RCRA permit shall not constitute a defense to a violation of the Environmental Protection Act or Subtitle G, except for development, modification or operation without a permit. Issuance of this permit does not convey property rights or any exclusive privilege. Issuance of this permit does not authorize any injury to persons or property or invasion of other private rights, or infringement of state or local law or regulations. (35 IAC 702.181)
2. **PERMIT ACTIONS.** This permit may be modified, reissued or revoked for cause as specified in 35 IAC 703.270 through 703.273 and Section 702.186. The filing of a request by the Permittee for a permit modification or revocation, or a notification of planned changes or anticipated noncompliance on the part of the Permittee does not stay the applicability or enforceability of any permit condition. (35 IAC 702.146)
3. **SEVERABILITY.** The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances and the remainder of this permit shall not be affected thereby. (35 IAC 700.107)
4. **PERMIT CONDITION CONFLICT.** In case of conflict between a special permit condition and a standard condition, the special condition will prevail. (35 IAC 702.160)
5. **DUTY TO COMPLY.** The Permittee shall comply with all conditions of this permit except for the extent and for the duration such noncompliance is authorized by an emergency permit. Any permit noncompliance constitutes a violation of the Environmental Protection Act and is grounds for enforcement action; permit revocation or modification; or for denial of a permit renewal application. (35 IAC 702.141 and 703.242)
6. **DUTY TO REAPPLY.** If the Permittee wishes to continue an activity allowed by this permit after the expiration date of this permit, the Permittee must apply for a new permit at least 180 days before this permit expires, unless permission for a later date has been granted by the Agency. (35 IAC 702.142 and 703.125)
7. **PERMIT EXPIRATION.** This permit and all conditions herein will remain in effect beyond the permit's expiration date if the Permittee has submitted a timely, complete

application (see 35 IAC 703.181-703.209) and through no fault of the Permittee the Agency has not issued a new permit as set forth in 35 IAC 702.125.

8. **NEED TO HALT OR REDUCE ACTIVITY NOT A DEFENSE.** It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. (35 IAC 702.143)
9. **DUTY TO MITIGATE.** In the event of noncompliance with the permit, the permittee shall take all reasonable steps to minimize releases to the environment, and shall carry out such measures as are reasonable to prevent significant adverse impacts on human health or the environment. (35 IAC 702.144)
10. **PROPER OPERATION AND MAINTENANCE.** The Permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory, and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of the permit. (35 IAC 702.145)
11. **DUTY TO PROVIDE INFORMATION.** The Permittee shall furnish to the Agency, within a reasonable time, any relevant information that the Agency may request to determine whether cause exists for modifying, revoking and reissuing or terminating this permit, or to determine compliance with this permit. The Permittee shall also furnish to the Agency, upon request, copies of records required to be kept by this permit. (35 IAC 702.148)
12. **INSPECTION AND ENTRY.** The Permittee shall allow an authorized representative of the Agency, upon the presentation of credentials and other documents as may be required by law, to:
  - a. Enter at reasonable times upon the Permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
  - b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
  - c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and



- d. Sample or monitor, at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the appropriate Act, any substances or parameters at any location. (35 IAC 702.149)

**13. MONITORING AND RECORDS.** (35 IAC 702.150)

- a. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. The method used to obtain a representative sample of the waste must be the appropriate method from Appendix A of 35 IAC 721. Laboratory methods must be those specified in Test Methods for Evaluating Solid Waste: Physical/Chemical Methods, SW-846, latest versions; Methods for Chemical Analysis of Water and Wastes, EPA-600/4-79-020, latest versions; or an equivalent method as specified in the approved Waste Analysis Plan.
- b. The Permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports and records required by this permit, and records of all data used to complete the application for this permit for a period of at least 3 years from the date of the sample, measurement, report or application. These periods may be extended by request of the Agency at any time. The permittee shall maintain records from all groundwater monitoring wells and associated groundwater surface elevations, for the active life of the facility, and for disposal facilities for the post-closure care period as well.
- c. Records of monitoring information shall include:
  - i. The date(s), exact place, and time of sampling or measurements;
  - ii. The individual(s) who performed the sampling or measurements;
  - iii. The date(s) analyses were performed;
  - iv. The individual(s) who performed the analyses;
  - v. The analytical technique(s) or method(s) used; and
  - vi. The result(s) of such analyses. (35 IAC 702.150)

- 14. REPORTING PLANNED CHANGES.** The permittee shall give notice to the Agency as soon as possible of any planned physical alterations or additions to the permitted facility. For a new HWM facility, the permittee may not commence treatment, storage or disposal of

hazardous waste; and for a facility being modified the permittee may not treat, store or dispose of hazardous waste in the modified portion of the facility, until:

- a. The permittee has submitted to the Agency by certified mail or hand delivery a letter signed by the permittee and a registered professional engineer stating that the facility has been constructed or modified in compliance with the permit; and
- b.
  1. The Agency has inspected the modified or newly constructed facility and finds it is in compliance with the condition of the permit; or
  2. If, within 15 days of the date of submission of the letter in paragraph (a), the permittee has not received notice from the Agency of its intent to inspect, prior inspection is waived and the permittee may commence treatment, storage or disposal of hazardous waste. (35 IAC 703.244 and 702.152(a))

**15. ANTICIPATED NONCOMPLIANCE.** The Permittee shall give advance notice to the Agency of any planned changes in the permitted facility or activity that may result in noncompliance with permit requirements. For a new facility, the permittee shall not treat, store or dispose of hazardous waste; and for a facility being modified; the permittee shall not treat, store or dispose of hazardous waste in the modification portion of the facility, except as provided in Section 703.280, until:

- a. The permittee has submitted to the Agency by certified mail or hand delivery a letter signed by the permittee and a registered professional engineer stating that the facility has been constructed or modified in compliance with the permit; and
- b. Either:
  - i. The Agency has inspected the modified or newly constructed facility and finds it is in compliance with the conditions of the permit; or
  - ii. Within 15 days after the date submission of the letter in section i above, the permittee has not received notice from the Agency of its intent to inspect, the permittee may commence treatment, storage or disposal of hazardous waste.

(35 IAC 702.152(b) and 703.247)

**16. TRANSFER OF PERMITS.** This permit is not transferable to any person except after notice to the Agency. The Agency may require modification of the permit to change the name of the permittee and incorporate such other requirements as may be necessary under

the appropriate Act. (See Sections 703.260 and 703.270, in some cases modification is mandatory.) (35 IAC 702.152(c))

**17. MONITORING REPORTS.** Monitoring results shall be reported at the intervals specified in the permit. (35 IAC 702.152(d))

**18. COMPLIANCE SCHEDULES.** Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than specified in 35 IAC 702.162. (35 IAC 702.152(e))

**19. TWENTY-FOUR HOUR REPORTING.**

- a. The Permittee shall report to the Agency any noncompliance with the permit that may endanger health or the environment. Any such information shall be reported orally within 24 hours from the time the Permittee becomes aware of the following circumstances. This report shall include the following:
  - i. Information concerning the release of any hazardous waste that may cause an endangerment to public drinking water supplies.
  - ii. Information concerning the release or discharge of any hazardous waste or of a fire or explosion at the HWM facility, which could threaten the environment or human health outside the facility.
- b. The description of the occurrence and its cause shall include:
  - i. Name, address, and telephone number of the owner or operator;
  - ii. Name, address, and telephone number of the facility;
  - iii. Date, time, and type of incident;
  - iv. Name and quantity of material(s) involved;
  - v. The extent of injuries, if any;
  - vi. An assessment of actual or potential hazards to the environment and human health outside the facility, where applicable; and

- vii. Estimated quantity and disposition of recovered material that resulted from the incident.
  - c. A written submission shall also be provided within 5 days of the time the Permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance including exact dates and times and if the noncompliance has not been corrected; the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance. The Agency may waive the five day written notice requirement in favor of a written report within fifteen days. (35 IAC 702.152(f) and 703.245(b))
- 20. OTHER NONCOMPLIANCE.** The Permittee shall report all instances of noncompliance not otherwise required to be reported under Standard Conditions 17, 18, and 19, at the time monitoring reports, as required by this permit, are submitted. The reports shall contain the information listed in Standard Condition 19. (35 IAC 702.152(g))
- 21. OTHER INFORMATION.** Where the Permittee becomes aware that it failed to submit any relevant facts in the permit application, or submitted incorrect information in a permit application or in any report to the Agency, the Permittee shall promptly submit such facts or information. (35 IAC 702.152(h))
- 22. REPORTING REQUIREMENTS.** The following reports required by 35 Ill. Adm. Code 724 shall be submitted in addition to those required by 35 Ill. Adm. Code 702.152 (reporting requirements):
- a. Manifest discrepancy report: if a significant discrepancy in a manifest is discovered, the permittee must attempt to reconcile the discrepancy with the waste generator or transporter. If the discrepancy is not resolved within 15 days after receiving the waste, the permittee must immediately submit to the Agency a letter describing the discrepancy and attempts to reconcile it and a copy of the manifest or shipping paper at issue. (35 IAC 724.172(b))
  - b. Unmanifested waste report: The permittee must submit to the Agency within 15 days of receipt of unmanifested waste an unmanifested waste report on EPA form 8700-13B. (35 IAC 724.176)
  - c. Annual report: an annual report must be submitted covering facility activities during the previous calendar year. (35 IAC 724.175)

- 23. SUBMITTAL OF REPORTS OR OTHER INFORMATION.** All written reports or other written information required to be submitted by the terms of this permit shall be sent to:

Illinois Environmental Protection Agency  
Division of Land Pollution Control #33  
Planning and Reporting Section  
1021 North Grand Avenue East  
Post Office Box 19276  
Springfield, Illinois 62794-9276

- 24. SIGNATORY REQUIREMENT.** All permit applications, reports or information submitted to the Agency shall be signed and certified as required by 35 IAC 702.126. (35 IAC 702.151)
- 25. CONFIDENTIAL INFORMATION.** Any claim of confidentiality must be asserted in accordance with 35 IAC 702.103 and 35 IAC 161.
- 26. DOCUMENTS TO BE MAINTAINED AT FACILITY SITE.** The Permittee shall maintain at the facility, until closure is complete, the following documents and amendments, revisions and modifications to these documents:
- a. Waste analysis plan as required by 35 IAC 724.113(b) and this permit.
  - b. Personnel training documents and records as required by 35 IAC 724.116(d) and this permit.
  - c. Contingency plan as required by 35 IAC 724.153(a) and this permit.
  - d. Closure plan as required by 35 IAC 724.212(a) and this permit.
  - e. Cost estimate for facility closure as required by 35 IAC 724.242(d) and this permit.
  - f. Operating record as required by 35 IAC 724.173 and this permit.
  - g. Inspection schedules as required by 35 IAC 724.115(b) and this permit.
- 27. WASTE MINIMIZATION.** The Permittee shall certify at least annually that the Permittee has a program in place to reduce the volume and toxicity of hazardous waste that he generates to the degree determined by the Permittee to be economically practicable, and the proposed method of treatment, storage, or disposal is that practicable method currently

available to the Permittee which minimizes the present and future threat to human health and the environment, in accordance with 35 IAC 724.173(b)(9).

## **GENERAL FACILITY STANDARDS**

28. **NOTICE OF WASTE FROM A FOREIGN SOURCE.** The permittee who has arranged to receive hazardous waste from a foreign source must notify the Agency in writing at least four weeks in advance of the date the waste is expected at the facility. (35 IAC 724.112(a))
29. **NOTICE OF WASTE FROM OFF-SITE.** The Permittee who receives hazardous waste from an off-site source (except where the Permittee is also the generator), must inform the generator in writing that the permittee has the appropriate permits for, and will accept, the waste the generator is shipping. The Permittee must keep a copy of this written notice as part of the facility operating record. (35 IAC 724.112(b))
30. **GENERAL WASTE ANALYSIS.** The Permittee shall comply with the procedures described in the approved waste analysis plan. (35 IAC 724.113)
31. **SECURITY.** The Permittee shall comply with the security provisions of 35 IAC 724.114(b) and (c).
32. **GENERAL INSPECTION REQUIREMENTS.** The Permittee shall follow the approved inspection schedule. The Permittee shall remedy any deterioration or malfunction discovered by an inspection as required by 35 IAC 724.115(c). Records of inspections shall be kept as required by 35 IAC 724.115(d).
33. **PERSONNEL TRAINING.** The Permittee shall conduct personnel training as required by 35 IAC 724.116 and shall maintain training documents and records as required by 35 IAC 724.116(d) and (e).
34. **GENERAL REQUIREMENTS FOR IGNITABLE, REACTIVE, OR INCOMPATIBLE WASTE.** The Permittee shall comply with the requirements of 35 IAC 724.117.

## **PREPAREDNESS AND PREVENTION**

35. **DESIGN AND OPERATION OF FACILITY.** The Permittee shall maintain and operate the facility to minimize the possibility of fire, explosion, or any unplanned sudden or non-sudden release of hazardous waste constituents to air, soil, or surface water which could threaten human health or the environment. (35 IAC 724.131)

36. **REQUIRED EQUIPMENT.** The Permittee shall equip the facility with the equipment set forth in the approved contingency plan, as required by 35 IAC 724.132.
37. **TESTING AND MAINTENANCE OF EQUIPMENT.** The Permittee shall test and maintain the equipment specified in condition 36 as necessary to assure its proper operation in time of emergency. Such testing and maintenance activities are set forth in the approved inspection schedule. (35 IAC 724.133)
38. **ACCESS TO COMMUNICATIONS OR ALARM SYSTEM.** The Permittee shall maintain access to the communications or alarm system as required by 35 IAC 724.134.
39. **REQUIRED AISLE SPACE.** The Permittee shall maintain aisle space as required by 35 IAC 724.135 and National Fire Protection Association (NFPA) requirements.
40. **ARRANGEMENTS WITH STATE AND LOCAL AUTHORITIES AND EMERGENCY RESPONSE CONTRACTORS.** The Permittee shall attempt to make emergency response arrangements with State and local authorities and agreements with State emergency response teams and emergency response contractors and equipment suppliers as required by 35 IAC 724.137. If State or local officials refuse to enter in preparedness and prevention arrangements with the Permittee, the Permittee must document this refusal in the operating record.

## **CONTINGENCY PLAN**

41. **IMPLEMENTATION OF PLAN.** The provisions of the contingency plan must be carried out by the Permittee immediately whenever there is a fire, explosion or release of hazardous waste or hazardous waste constituents which could threaten human health or the environment (35 IAC 724.151(b)). Within 15 days of any incident that requires implementation of the contingency plan, the owner or operator must submit a written report to the Agency as required by 35 IAC 724.156(j).
42. **COPIES OF PLAN.** A copy of the contingency plan, including any revisions, must be maintained at the facility and submitted to all local police and fire departments, hospitals and state and local emergency response teams as required by 35 IAC 724.153.
43. **AMENDMENTS TO PLAN.** The Permittee shall review and immediately amend, if necessary, the contingency plan, as required by 35 IAC 724.154.
44. **EMERGENCY COORDINATOR.** A trained emergency coordinator shall be available at all times in case of an emergency as required by 35 IAC 724.155 and 724.156.

## **MANIFEST SYSTEM RECORD KEEPING AND REPORTING**

- 45. **MANIFEST SYSTEM.** The Permittee shall comply with the manifest requirements of 35 IAC 724.171, 724.172, 724.176 and 733.
- 46. **OPERATING RECORD.** The Permittee shall maintain a written operating record at the facility in accordance with 35 IAC 724.173.
- 47. **ANNUAL REPORT.** The Permittee shall prepare and submit an annual report to the Agency prior to March 1st of each year in accordance with the requirements of 35 IAC 724.175.

## **CLOSURE**

- 48. **PERFORMANCE STANDARD.** The Permittee shall close the facility as required by 35 IAC 724.211 and in accordance with the approved closure plan.
- 49. **AMENDMENT TO CLOSURE PLAN.** The Permittee must amend the closure plan whenever there is a change in the expected year of closure or whenever a change in the facility operation plans or facility design affects the closure plan pursuant to 35 IAC 724.212(c).
- 50. **NOTIFICATION OF CLOSURE.** The Permittee shall notify the Agency at least 60 days prior to the date it expects to begin closure. (35 IAC 724.212(d))
- 51. **TIME ALLOWED FOR CLOSURE.** After receiving the final volume of hazardous waste, the Permittee shall treat or remove from the site all hazardous waste and complete closure activities in accordance with the schedule(s) specified in the closure plan. (35 IAC 724.213)
- 52. **DISPOSAL AND/OR DECONTAMINATION OF EQUIPMENT.** When closure is completed, the Permittee shall decontaminate and/or dispose of all facility equipment and structures as required by the approved closure (35 IAC 724.214) plan.
- 53. **CERTIFICATION OF CLOSURE.** When closure is completed, the Permittee shall submit certification to the Agency in accordance with 35 IAC 724.215 that the facility has been closed as specified by the approved closure plans.
- 54. **COST ESTIMATE FOR FACILITY CLOSURE.** The Permittee's original closure cost estimate, prepared in accordance with 35 IAC 724.242, must be:



- a. Adjusted for inflation either 60 days prior to each anniversary of the date on which the first closure cost estimate was prepared or if using the financial test or corporate guarantee, within 30 days after close of the firm's fiscal year.
- b. Revised whenever there is a change in the facility's closure plan increasing the cost of closure.
- c. Kept on record at the facility and updated. (35 IAC 724.242)

- 55. FINANCIAL ASSURANCE FOR FACILITY CLOSURE.** The Permittee shall demonstrate compliance with 35 IAC 724.243 by providing documentation of financial assurance, as required by 35 IAC 724.251, in at least the amount of the cost estimates required by the previous Permit Condition. Changes in financial assurance mechanisms must be approved by the Agency pursuant to 35 IAC 724.243.
- 56. LIABILITY REQUIREMENTS.** The Permittee shall demonstrate continuous compliance with the requirements of 35 IAC 724.247 and the documentation requirements of 35 IAC 724.251.
- 57. INCAPACITY OF OWNERS OR OPERATORS, GUARANTORS, OR FINANCIAL INSTITUTIONS.** The Permittee shall comply with 35 IAC 724.248 whenever necessary.

### **LAND DISPOSAL RESTRICTIONS**

- 58. DISPOSAL PROHIBITION.** Any waste identified in 35 IAC Part 728, Subpart C, or any mixture of such a waste with nonrestricted wastes, is prohibited from land disposal unless it meets the standards of 35 IAC Part 728, Subpart D, or unless it meets the requirements for exemptions under Subpart C. "Land disposal" means placement in or on the land and includes, but is not limited to, placement in a landfill, surface impoundment, waste pile, injection well, land treatment facility, or vault intended for disposal.
- 59. DILUTION PROHIBITION.** The Permittee shall not in any way dilute a restricted waste or residual from treatment of a restricted waste as a substitute for adequate treatment in order to achieve compliance with 35 IAC 728, Subpart D (35 IAC 728.103).
- 60. WASTE ANALYSIS.**
1. The Permittee must test his waste or extract developed, using the test method identified in Appendix I of 40 CFR Part 268, or use knowledge of the waste, to determine if the waste is restricted from land disposal.

2. For any waste with treatment standards expressed as concentrations in the waste extract, the Permittee must test the treatment residues or an extract of such residues developed using the test method described in Appendix I of 40 CFR Part 268, to assure that the treatment residues or extract meet the applicable treatment standard.
3. If the treatment residues do not meet the treatment standards, or if the Permittee ships any restricted wastes to a different facility, the Permittee shall comply with the requirements applicable to generators in 35 IAC 728.107 and 728.150(a)(1).

#### **61. STORAGE RESTRICTIONS**

1. The Permittee shall not store hazardous wastes restricted from land disposal under 35 IAC Part 728, Subpart C unless such wastes are stored only in containers or tanks, and are stored solely for the purpose of the accumulation of such quantities as is necessary to facilitate proper recovery, treatment, or disposal, and: (1) each container is clearly marked to identify its contents and the date each period of accumulation begins; (2) each tank is clearly marked to identify its contents, the quantity of each hazardous waste received, and the date each period of accumulation begins, as required by 35 IAC 728.150.
2. The Permittee must comply with the operating record requirements of 35 IAC 724.173.

#### **62. NEW DETERMINATIONS OF PROHIBITED WASTES**

Wastes which are prohibited from land disposal under 35 IAC Part 728, Subpart C, or for which treatment standards have been established under 35 IAC 728, Subpart D, subsequent to the date of issuance of this permit, shall be subject to the conditions number 58 through 61 above.

## **SECTION III: CORRECTIVE ACTION**

### **A. INTRODUCTION**

1. In accordance with Section 3004 of RCRA and 35 IAC 724.201, the Permittee shall institute such corrective action as necessary to protect human health and the environment from all releases of hazardous wastes and hazardous constituents, listed in Appendix H of 35 IAC Part 721, from any solid waste management unit (SWMU) at its facility in Lakemoor, Illinois. The requirements set forth in this section ensure compliance with Section 30004(u) of RCRA and 35 Ill. Adm. Code 724.201.
2. Based upon a review of the available information, no SWMUs are currently present at the subject facility. However, there exists a possibility that the Permittee may, in the future, find or create SWMUs. Therefore, this section sets forth the procedures that the Permittee must follow if it finds or creates SWMUs in the future.

### **B. NOTIFICATION REQUIREMENTS FOR AN ASSESSMENT OF NEWLY-IDENTIFIED SOLID WASTE MANAGEMENT UNIT(S)**

1. The Permittee shall notify the Illinois EPA in writing of any newly-identified SWMU(s) discovered during the course of groundwater monitoring, field investigations, environmental audits, or other means, no later than sixty (60) calendar days after discovery. The notification shall provide the following information, as available:
  - a. The location of the newly-identified SWMU in relation to other SWMUs on a scaled map or drawing;
  - b. The type and past and present function of the unit;
  - c. The general dimensions, capacities, and structural description of the unit (available drawings and specifications provided);
  - d. The period during which the unit was operated;
  - e. The specifics on all materials, including but not limited to, wastes and hazardous constituents, that have been or are being managed at the SWMU, to the extent available; and
  - f. The results of any relevant available sampling and analysis which may aid in determining whether releases of hazardous wastes or hazardous constituents have occurred or are occurring from the unit.

2. If the submitted information demonstrates a potential for a release of hazardous waste or hazardous waste constituents from the newly identified SWMU, the Illinois EPA may request in writing, that the Permittee prepare a Solid Waste Management Unit (SWMU) Assessment Plan and a proposed schedule of implementation and completion of the Plan for any additional SWMU(s) discovered subsequent to the issuance of this Permit. Guidance for the development of a SWMU assessment plan will be provided in Illinois EPA's written request for such a plan.

This SWMU Assessment plan must propose investigations, including field investigations if necessary, to determine the release potential to specific environmental media for the newly-identified SWMU. The SWMU Assessment Plan must demonstrate that the sampling and analysis program, if applicable, is capable of yielding representative samples and must include parameters sufficient to identify migration of hazardous waste and hazardous constituents from the newly-discovered SWMU(s) to the environment.

3. The Illinois EPA shall approve, approve with conditions, or disapprove the Plan in writing. If the plan is approved, the Permittee shall begin to implement the Plan within forty-five (45) calendar days of receiving such written notification. If the Plan is disapproved, the Illinois EPA shall notify the Permittee in writing of the Plan's deficiencies and specify a due date for submittal of a revised plan.
4. The Permittee shall submit a report documenting the results of the approved SWMU Assessment Plan to the Illinois EPA in accordance with the schedule in the approved SWMU Assessment Plan. The SWMU Assessment Report shall describe all results obtained from the implementation of the approved SWMU Assessment Plan.
5. Additional investigation, and corrective measures as necessary, shall be carried out to ensure the requirements of 35 Ill. Adm. Code 724.201 are met. Further guidance regarding compliance with these requirements will be provided as necessary. The requirements of 35 Ill. Adm. Code 742 must also be met.
6. All Illinois EPA action on newly identified SWMUs are subject to the appeal provisions of Sections 39(a) and 40(a) of the Illinois Environmental Protection Act.

#### **C. FINANCIAL ASSURANCE**

35 Ill. Adm. Code 724.201 requires that financial assurance be established for completing required corrective action at solid waste management units:

1. The Permittee shall demonstrate compliance with the financial assurance requirements of 35 Ill. Adm. Code 724.201 by providing documentation of financial assurance using a mechanism specified in 35 Ill. Adm. Code 724.243, in at least the amount of the approved corrective action cost estimate. The words "completion of corrective action" shall be

substituted for "closure and/or post-closure", as appropriate in the financial instrument specified in 35 Ill. Adm. Code 724.251. The Illinois EPA may accept financial assurance for completion of corrective action in combination with another financial mechanism that is acceptable under 35 Ill. Adm. Code 724.246 at its discretion.

2. The financial assurance requirements of 35 Ill. Adm. Code 724.201 must also be met for any investigative or corrective action efforts carried out in accordance with Subsection III.B above. Detailed cost estimates must be developed for any activities carried out under these Sections and must accompany any workplan/report submitted to Illinois EPA for review and approval. Appropriate documentation of financial assurance in at least the amount of the approved cost estimate must be submitted to Illinois EPA within 60 days after the cost estimates are approved.
3. Financial assurance for corrective action must be updated, as necessary, to reflect the current status of the RCRA corrective action program at this facility.

## ATTACHMENT A

### GENERAL INSPECTION SCHEDULE

ITEM	INSPECTION ELEMENTS – TYPES OF PROBLEMS	INSPECTION FREQUENCY
Access to Facility	<ul style="list-style-type: none"> <li>Doors closed</li> <li>Doors locked (when appropriate)</li> </ul>	Daily
Container Storage Area	<ul style="list-style-type: none"> <li>Arrangement of Containers as required in the permit,</li> <li>Adequate (6 foot) aisle spacing between rows of storage racks (marked aisles must be free of containers or other obstructions),</li> <li>Containers not stacked,</li> <li>Ambient air mercury concentration is not greater than 0.05 mg/m<sup>3</sup> averaged over 8 hour period</li> </ul>	Daily
Containers in Storage	<ul style="list-style-type: none"> <li>Damaged storage containers,</li> <li>Damaged pallets,</li> <li>Evidence of leaking containers, broken lamps (phosphor powder),</li> <li>Open containers,</li> <li>Containers are properly marked and labeled</li> <li>Volume of containers in storage does not exceed permitted storage volume.</li> </ul>	Daily
Common Area – Loading Dock	<ul style="list-style-type: none"> <li>Timely removal of containers (within 8 hours of their arrival)</li> </ul>	3 times per day
Warning Signs	Presence of warning signs	Weekly
Decontamination Equipment (shovel, broom, dust pan, central vacuum system, trisodium phosphate solution spray, extra	<ul style="list-style-type: none"> <li>Adequate Supply</li> <li>Deterioration, damage</li> <li>Operability of equipment</li> <li>Accessibility</li> </ul>	Weekly

ITEM	INSPECTION ELEMENTS – TYPES OF PROBLEMS	INSPECTION FREQUENCY
shipping/storage containers, 55 gallon steel drum)		
Internal / External Communications	<ul style="list-style-type: none"> <li>• Operability</li> <li>• Accessibility</li> </ul>	Monthly
Fire Extinguishers	<ul style="list-style-type: none"> <li>• Operability</li> <li>• Evidence of Tampering</li> <li>• Accessibility</li> </ul>	Monthly
First Aid Equipment	<ul style="list-style-type: none"> <li>• Adequate Supply</li> <li>• Deterioration, damage</li> <li>• Operability of Supplies</li> <li>• Accessibility</li> </ul>	Monthly
Personal Protective Equipment: Tyvek Coveralls and Boot covers, Rubber Gloves, Half face respirators with HEPA-Mercury vapor cartridges	<ul style="list-style-type: none"> <li>• Adequate supply</li> <li>• Deterioration, damage (e.g. cracks, tears, punctures, stiffness)</li> <li>• Operability</li> <li>• Accessibility</li> </ul>	Monthly
Concrete Sealer on the Floor of the Container Storage Area	<ul style="list-style-type: none"> <li>• Deterioration, damage, cracks, gaps</li> </ul>	Annual

## ATTACHMENT B

### Closure Certification Statement

This statement is to be completed by both the responsible officer and by the registered professional engineer upon completion of closure. Submit one copy of the certification with original signatures and three additional copies.

The hazardous waste container storage unit (S01) at the facility described in this document has been closed in accordance with the specifications in the approved closure plan. I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

\_\_\_\_\_  
USEPA ID Number

\_\_\_\_\_  
Facility Name

\_\_\_\_\_  
Signature of Owner/Operator

\_\_\_\_\_  
Name and Title

\_\_\_\_\_  
Signature of Registered P.E.

\_\_\_\_\_  
Name of Registered P.E. and Illinois  
Registration Number

[P.E. Stamp]

\_\_\_\_\_  
Date



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Fluorecycle  
RCRA Log No. B-168

March 2001  
Page C-1 of C-1

## **Attachment C**

### **Closure Cost Estimate**

**TABLE I.1**  
**CLOSURE COST ESTIMATE**

Item	Unit Cost	Unit	Number of Units	Cost
Inventory lamp processing	\$0.50	per lamp	80,000	\$40,000
Storage area cleaning				
Labor	\$60	per hour	160	\$9,600
Other direct costs	\$1,000	lump sum	1	\$1,000
Container disposal	\$5,000	lump sum	1	\$5,000
Sampling and analysis				
Labor	\$60	per hour	16	\$960
Other direct costs	\$5,000	lump sum	1	\$5,000
Total				\$61,560
Contingency @15%				\$9,234
Total				\$70,794

## ATTACHMENT D

### REPORTING AND NOTIFICATION REQUIREMENTS

The reporting and notification requirements of each section of the RCRA permit are summarized below. This summary is provided to highlight the various reporting and notification requirements of this permit.

CONDITION	SUBMITTAL	DUE DATE
CONTAINER STORAGE		
I.I.2	Notify Regional Office of implementation of the Contingency Plan.	Within 24 hours of implementation of the Contingency Plan.
I.J.1	Notify Agency of intent to close the container storage area	At least 180 days prior to commencement of closure.
I.J.1	Submit decontamination and/or soil sampling and analysis plan for review.	At least 180 days prior to closure.
I.J.3	Submit application for modification of permit and closure / post-closure plan.	No later than 60 days after determining the container storage area cannot be clean closed.
I.J.5	Update Financial Assurance for closure and post-closure of the container storage area.	No later than 30 days after modification of the permit to include post-closure care.
I.J.6	Certification of Closure	Within 60 days of completing closure of the container storage area.
I.L.1	Revised Part A	On or before July 2, 2001
I.L.2	Analytical Test Results of Wastes	On or before July 2, 2001
I.L.3	Description of location(s) and tools used to open containers	On or before July 2, 2001
I.L.4	Copy of Inspection Log	On or before July 2, 2001
I.L.5	Revised Contingency Plan	On or before July 2, 2001
I.L.6	Documentation that copies of the Contingency Plan were sent to local agencies.	On or before July 2, 2001
I.L.7	Documentation of agreements and arrangements with local agencies.	On or before July 2, 2001

CONDITION	SUBMITTAL	DUE DATE
I.L.8	Documentation that the Training Director is trained in hazardous waste regulations.	On or before July 2, 2001
I.L.9	Minimum training that all job positions will receive.	On or before July 2, 2001
I.L.10	Revised Closure Cost Estimate	On or before July 2, 2001
I.L.11	Revised Financial Assurance Documents.	On or before July 2, 2001
STANDARD CONDITIONS		
II.6	Complete application for new permit	At least 180 days prior to expiration of this permit.
II.11	Information requested by Agency and copies of records required to be kept by this permit.	Within a reasonable time of the request.
II.14	Notify the Agency of planned physical alterations or additions	At least 15 days prior to any planned change.
II.15	Notify Agency of any changes that may result in noncompliance with this permit.	Within 15 days of the change.
II.16	Application for permit modification to transfer permit.	At least 90 days prior to the transfer date.
II.18	Submission of any information required in a compliance schedule.	Within 14 days after each schedule date.
II.19	Report to Agency any non-compliance that may endanger human health or the environment.	
	By telephone	Within 24 hours after discovery.
	In writing	Within 5 days after discovery.
II.20	Report all other instances of noncompliance	March 1 of each year along with Annual Report.
II.22	Manifest discrepancy report.	Within 15 days of receipt of waste (if discrepancy is not resolved)
II.22	Unmanifested waste report	Within 15 days of receipt of unmanifested waste.
II.28	Notify Agency in writing of expected receipt of hazardous waste from	At least 4 weeks prior to receipt of waste.

CONDITION	SUBMITTAL	DUE DATE
	foreign source	
II.41	Implementation of Contingency Plan	
	Notify appropriate state and local agencies with designated response roles.	As needed.
	Notify appropriate local officials.	Immediately if emergency coordinator's assessment indicates evacuation of local area is advisable.
	Notify the Agency (217/782-3637) or Illinois ESDA (217/782-7860) if emergency coordinator determines there has been a release, fire or explosion that could threaten human health or the environment, outside the facility.	Immediately after determination is made
	Notify Agency and appropriate state and local authorities, in writing that facility is in compliance with 35 IAC 724.156(h).	Prior to resuming operation in affected areas.
	Report to Agency details regarding incident that required implementation of contingency plan.	Within 15 days after event.
II.47	Annual Report required by 724.175.	March 1 of each year.
II.49	Permit modification to amend closure plan.	As required.
II.50	Notification of closure	At least 60 days prior to initiating closure.
II.54	Closure cost estimate adjusted for inflation.	60 days prior, or 30 days after anniversary date (depending on type of financial instrument used).
II.54	Revised closure cost estimate	As needed.
II.55	Change in financial assurance mechanism.	As needed.
II.56	Change in coverage for sudden or non-sudden liability insurance.	As needed.
II.57	Notification of commencement of voluntary or involuntary bankruptcy proceedings	Within 10 days after commencement of proceeding.

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CONDITION	SUBMITTAL	DUE DATE
III.B.1	Notification of new SWMU.	Within 60 calendar days after discovery of SWMU.

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## ATTACHMENT E

### APPROVED PART B APPLICATION

	<u>PAGE</u>	<u>REVISION</u> <u>DATE</u>
<b>PART A APPLICATION</b>	Section A	5/8/00
<b>SECTION B - FACILITY DESCRIPTION</b>		
B-1 General Description	B1	6/26/99 (Rev 1)
B-2 Topographic Map	B-4	2/18/99 (Rev 0)
B-2a General Map Requirements	B0	10/9/00
B-2b Additional Map Requirements for Disposal Facilities	B-5 (NA)	2/18/99 (Rev 0)
B-3 Location Information	B-5	2/18/99 (Rev 0)
B-3a Seismic Standard	B-5	2/18/99 (Rev 0)
B-3b Floodplain Standard	B-5	2/18/99 (Rev 0)
B-3c Other Location Requirements	B-6	6/26/00 (Rev 1)
B-4 Traffic Information	B-6	6/26/00 (Rev 1)
B-5 Operating Record	B-6, B11, B12	6/26/00 (Rev 1)
B-6 Receiving Inspection	B-10	6/26/00
Photographs of facility	B13 to B17	No Date
Storage Rack Specifications	B22 to B24	No Date
Containment Pallets & Basins	B25	No Date
<b>SECTION C - WASTE ANALYSIS PLAN</b>		
C-1 CHEMICAL AND PHYSICAL ANALYSIS	C-1	10/16/00 (Rev 2)
C-1a Containerized Waste	C-2	6/26/00 (Rev 1)
C-2 WASTE ANALYSIS PLAN	C-3	6/26/00 (Rev 1)
C-2a Parameters and Rationale	C-3	6/26/00 (Rev 1)
C-2b Test Methods	C-3	6/26/00 (Rev 1)
C-2c Sampling Methods	C-4	6/19/00 (Rev 1)
C-2d Frequency of Analysis	C-4	6/19/00 (Rev 1)
C-2f Additional Requirements for Ignitable, Reactive or Incompatible Wastes	C-4	6/19/00 (Rev 1)
C-2g Waste Analysis Requirements for Land Disposal Ban	C-4	6/19/00 (Rev 1)

<u>Approved Permit Application</u>		<u>PAGE</u>	<u>REVISION</u> <u>DATE</u>
C-3	Quality Control	C-4	6/19/00 (Rev 1)
C-4	Receiving Inspection	C-5	10/9/00
How to Pack & Ship Spent Lamps (DRAFT)		C6	no date
Shipping Form (DRAFT)		C7	no date
Recycle Bill of Lading (DRAFT)		C8	no date
Receiving / Inspection Form (DRAFT)		C9	no date
Certificate of Lamp Destruction (DRAFT)		C10	no date
Mercury Vapor Monitoring Log (DRAFT)		C11	no date
Report of Laboratory Analysis (DRAFT)		C11, C12	04/14/00

#### **SECTION D - PROCESS INFORMATION**

D-1 Containers			
D-1a	Containers with Free Liquids (NA)	D1	06/26/00 (Rev 1)
D-1b	Containers Without Free Liquids	D1	06/26/00 (Rev 1)
	D-1b(1) Test for Free Liquids	D1	06/26/00 (Rev 1)
	D-1b(2) Description of Containers	D1-D6	06/26/00 (Rev 1)
			06/20/00 (Rev 0)
			06/26/00 (Rev 2)
	D-1b(3) Container Management Practices	D6, D7	06/26/00 (Rev 2)
	D-1b(4) Container Storage Area Drainage	D7	06/26/00 (Rev 2)

#### **SECTION E - GROUNDWATER MONITORING (NA) E1** 06/19/00 (Rev 0)

#### **SECTION F - PROCEDURES TO PREVENT HAZARDS**

F-1	Security		06/26/00 (Rev 1)
F-1a	Security Procedures and Equipment	F1	06/26/00 (Rev 1)
	F-1a(1) 24-Hour Surveillance System	F1	06/26/00 (Rev 1)
	F-1a(2) Barrier and Means to Control Entry	F1	06/26/00 (Rev 1)
	F-1a(2)(a) Barrier	F1	06/26/00 (Rev 1)
	F-1a(2)(b) Means to Control Entry	F1	06/26/00 (Rev 1)
	F-1a(3) Warning Signs	F1	06/26/00 (Rev 1)
F-2	Inspection Schedule	F1	06/26/00 (Rev 1)
F-2a	General Inspection Requirements	F2	06/26/00 (Rev 1)
	F-2a(1) Types of Problems		06/26/00 (Rev 1)



<u>Approved Permit Application</u>	<u>PAGE</u>	<u>REVISION DATE</u>
F-2a(2) Frequency of Inspections	F2	06/26/00 (Rev 1)
F-2b Specific Process Inspection Requirements	F2	06/26/00 (Rev 1)
F-2b(1) Container Inspection	F2	06/26/00 (Rev 1)
F-3 Preparedness and Prevention Requirements	F3	06/26/00 (Rev 1)
F-3a Equipment Requirements	F3	06/26/00 (Rev 1)
F-3a(1) Internal Communications	F3	06/26/00 (Rev 1)
F-3a(2) External Communications	F3	06/26/00 (Rev 1)
F-3a(3) Emergency Equipment	F3	06/26/00 (Rev 1)
F-3a(4) Water for Fire Control	F3	06/26/00 (Rev 1)
F-3b Aisle Space Requirements	F3	06/26/00 (Rev 1)
F-4 Preventive Procedures, Structures, and Equipment	F3	06/26/00 (Rev 1)
Approved Permit Application		
F-4a Unloading Operations	F3	06/26/00 (Rev 1)
F-4b Run Off	F5	06/26/00 (Rev 1)
F-4c Water Supplies	F6	06/26/00 (Rev 1)
F-4d Equipment and Power Failure	F6	06/26/00 (Rev 1)
F-4e Personnel Protective Equipment	F6	06/26/00 (Rev 1)
F-5 Prevention of Reaction of Ignitable, Reactive and Incompatible Wastes (NA)	F6	06/26/00 (Rev 1)
Mercury Monitor Procedure (Sections 3.4 to 3.8)	F7 – F10	no date
<b>SECTION G - CONTINGENCY PLAN</b>		
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G-2 Emergency Coordinator	G2, G3	06/26/00 (Rev 2)
G-3 Implementation	G3, G4, G5	06/26/00 (Rev 2)
G-4 Emergency Response Procedures	G6	06/26/00 (Rev 2)
G-4a Notification	G7	06/26/00 (Rev 2)
G-4b Identification of Hazardous Materials	G7	06/26/00 (Rev 2)
G-4c Assessment	G7	06/26/00 (Rev 2)
G-4d Control Procedures	G8, G6	6/05/91

<u>Approved Permit Application</u>	<u>PAGE</u>	<u>REVISION DATE</u>
G-4e Prevention of Recurrence or Spread of Fires, Explosions or Releases	G8	06/26/00 (Rev 2)
G-4f Storage and Treatment of Released Material	G8	06/26/00 (Rev 2)
G-4g Incompatible Waste	G8	06/26/00 (Rev 2)
G-4h Post-Emergency Equipment Maintenance	G8	06/26/00 (Rev 2)
G-4i Container Spills and Leakage	G8	06/26/00 (Rev 2)
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G-6 Coordination Agreement Requirements	G9	06/26/00 (Rev 2)
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G-8 Required Reports	G10	06/26/00 (Rev 2)
Letter from Fox Lake Fire Dept.	G14	04/28/00 Received 06/27/00
Inspection Report from Village of Fox Lake	G15	06/22/99
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H-1 Outline of the Training Program	H1	06/20/00 (Rev 1)
H-1a Job Title/Job Description	H1	06/20/00 (Rev 1)
H-1b Training Content, Frequency and Techniques	H1	06/20/00 (Rev 1)
H-1c Training Director	H2	06/20/00 (Rev 1)
H-1d Relevance of Training to Job Position	H2	06/20/00 (Rev 1)
H-1e Training for Emergency Response	H2	06/20/00 (Rev 1)
H-2 Implementation of Training Program	H2	06/20/00 (Rev 1)
Facility Specific Hazard Awareness Training Program	H3, H4	06/20/00 (Rev 1)
<b>SECTION I - CLOSURE AND POST-CLOSURE REQUIREMENTS</b>		
I-1 Closure Plan		
I-1a Closure Performance Standard	I1	06/20/00 (Rev 0)
I-1b Partial Closure Activities	I2	06/20/00 (Rev 0)

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I-1c Maximum Waste Inventory	I2	06/20/00 (Rev 0)
I-1d Inventory Removal, Disposal or Decontamination of Equipment, Structures and Soils	I2, I3	06/20/00 (Rev 0)
I-1e Closure of Disposal Units (NA)	I3	06/20/00 (Rev 0)
I-1f Schedule for Closure	I3	06/20/00 (Rev 0)
I-1g Extensions of Closure Time (NA)	I3	06/20/00 (Rev 0)
I-2 Post-Closure Plan (NA)	I4	06/20/00 (Rev 0)
I-3 Notice in Deed and Certification	I4	06/20/00 (Rev 0)
I-4 Closure Cost Estimate	I4	06/20/00 (Rev 0)
I-5 Financial Assurance Mechanism for Closure	I4	06/20/00 (Rev 0)
I-6 Post Closure Cost Estimate	I4	06/20/00 (Rev 0)
I-7 Financial Assurance Mechanisms for Post Closure (NA)	I4	06/20/00 (Rev 0)
I-8 Liability Requirements		
I-8a Coverage for Sudden Accidental Occurrence	I5	06/20/00 (Rev 0)
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<b>SECTION J – OTHER FEDERAL LAWS</b>	J1	06/26/00 (Rev 0)
<b>SECTION K - PART B CERTIFICATION</b>		
Operator Certification	K-1A	10/02/00 (Rev 2)
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L-1 Solid Waste Management Units	L1	02/18/99 (Rev 0)
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Figure B.2 – Floor Plan	B18	08/07/98 (Received 6/27/00)
Figure B.3 – Topographic Map	B8	02/20/98
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Figure B.5 – Surrounding Land Use	B19	02/22/99 (Received 6/27/00)
Figure B.6 – Site Plan	B20	12/19/98 (Received 6/27/00)
Figure – Exterior Elevations	B21	08/07/98 (Received 6/27/00)
Figure B.6 – Site Plan	G16	12/19/98 (Received 6/27/00)

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Table G.1 – Emergency Contacts	G12	03/01/99 (Rev 0)
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Table I.1 – Closure Cost Estimate	I6	02/28/99 (Rev 0)

#### **LIST OF APPENDICES**

- Appendix 1: Village of Lakemoor's Certification of Siting Approval, and ordinance approving a conditional use permit for the Fluorecycle site.
- Appendix 2: Manufacturer's Technical Literature
- Appendix 3: IDNR, ISWS's non-floodplain area determination letter
- Appendix 4: Preliminary Operating Logs
- Appendix 5: Pollution Liability Insurance Certificate
- Appendix 6: Prior Conduct Certifications
- Appendix 7: Property owner letter certifying that the facility has never been used as a SWMU
- Appendix 8: Property lease and ownership information



## ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276

THOMAS V. SKINNER, DIRECTOR

217/524-3300

March 14, 2000

CERTIFIED MAIL

P 344 306 031

Mr. Robert Woods  
Fluorecycle, Inc.  
27780 West Concrete Drive, Unit A  
Ingleside, Illinois 60041

Re: 0974455001 -- Lake County  
Fluorecycle  
ILR 000 049 833  
Log No: B-168  
Administrative Record File

Dear Mr. Woods:

The Illinois Environmental Protection Agency has completed the second combined completeness/technical review of the RCRA Part B permit application for the hazardous waste container storage area (S01) at the Fluorecycle facility. A list of comments on the application identified during this review is included in the attachment to this letter. This review was performed on the response to comments submitted by ESI on behalf of Fluorecycle dated June 7, 1999 and received June 8, 1999, and the revised pages submitted by ESI on behalf of Fluorecycle dated July 29, 1999 and received August 4, 1999.

Each of the comments must be addressed before the Illinois EPA can complete the review of your permit application. Your response must be postmarked no later than April 10, 2000. The response should be in a format which allows incorporation of the new information into the appropriate sections of your application. To allow for a proper review of this new information, the location of the response to each deficiency should be identified in a list cross-referencing these items. Each revised page or drawing must have the revision date identified on them for tracking purposes.

A certification identical to that outlined in 35 Ill. Adm. Code 702.126 must accompany your submission. The original response and two copies should be submitted to the following address:

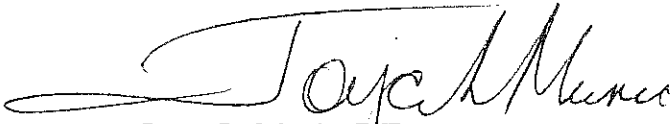
Illinois Environmental Protection Agency  
Bureau of Land -- #33  
Permit Section  
1021 North Grand Avenue East  
Post Office Box 19276  
Springfield, Illinois 62794-9276

GEORGE H. RYAN, GOVERNOR

Page 2

If you have any questions regarding this subject, feel free to contact Rob Watson, P.E. of my staff at 217/524-3265.

Sincerely,

A handwritten signature in cursive script, reading "Joyce L. Munie". The signature is written in dark ink and is positioned above the printed name.

Joyce L. Munie, P.E.  
Manager, Permit Section  
Bureau of Land

JLM:WRW:bjh\2983S.WPD

JHK

Attachment

cc: Harriet Croke, USEPA Region V  
Nick Malone, P.E., ESI

## **Fluorecycle 0974455001**

**Log No: B-168**

### **2<sup>nd</sup> Completeness and Technical Review**

#### **Comments**

1. Based on the February 10, 2000 conference call, it is the IEPA's understanding that Fluorecycle only proposes to receive light bulbs which contain mercury (hazardous waste) and on occasion, incandescent light bulbs (a nonhazardous waste). Other types of wastes previously discussed, such as ballasts, batteries, thermostats, etc. are no longer the subject of the RCRA permit application.

The application needs to clearly identify each specific type of waste which the facility proposes to receive, how it will be managed, and the locations at the facility (both in the narrative and on a scale drawing) where each type of waste will be managed at the site.

It is important to understand the permitting implications of managing different types of waste at a facility. Provided all the waste management activities are identified in the RCRA permit application, a unit which stores both hazardous and nonhazardous waste can be permitted in a RCRA Part B permit. The storage unit would not require a nonhazardous permit under 35 IAC Part 807. However, if a facility handles hazardous and nonhazardous waste in separate units/areas, those units/areas which treat, store or dispose of solely nonhazardous waste need to be permitted under 35 IAC 807 to 815.

#### **Section A**

2. The response to the initial Comment 3 states that no other permits are required. The narrative in the application needs to be revised to reflect this response.
3. The application, and each resubmittal must be accompanied by a certification as specified in 702.126(d). Both the owner of the property and operator of the facility must sign this certification. The response states a signed certification is provided. It was not. A new P.E. certification also needs to be provided each time new technical data and information is provided.

During the 2-10-00 conference call, Fluorecycle representatives stated Bill Murphy is the owner of the property (not Leonard Worth). The application should include a clear concise description of who owns the property, who the property is leased to, and who is the owner / operator of Fluorecycle. Finally, a revised Part A will need to be provided which identifies Mr. Murphy as the owner.

4. A revised Table of Contents needs to be provided to indicate new information, such as documentation of the public participation at the end of Section A, was added to the application.

## **B General Facility Description**

5. The legal description provided on the revised pages appears to apply to the entire property owned by MGDSF Partnership. The application also needs to include a legal description of the property leased by Fluorecycle. If a legal description of the leased property is not available, the application should indicate this, the reasons why, and a copy of the lease agreement.
6. The building layout on Figure B.2 and B.6, it appears to indicate that waste will **not** be unloaded directly onto the property leased by Fluorecycle. Instead it must past through part of the existing building in order to get into the building leased by Fluorecycle. However, during the 2-10-00 conference call, Fluorecycle representatives stated that although the dock area is not part of the property leased to Fluorecycle, it is a common area used by all businesses operating in the building and the lease agreement give Fluorecycle access to the loading dock.

The application needs to be revised to clearly describe the physical layout, operation and of the loading dock area. It should also describe how other businesses in the building share access to the area. Figures B.2 and B.6 need to be revised to clearly identify the loading dock area. All walls which separate the dock area from other businesses on the property should also be indicated on the drawings.

7. All drawings (and narrative) in the application need to be consistent. The following issues regarding the drawings in Section B need to be addressed:
  - a. The southwest corner of the building shown in Figure B.2 is not consistent with the building shown in Figure B.6.
  - b. Revised Figures B.3 and B.6 were received on August 4, 1999. However, it appears that no changes were made to these figures. The response to comments did not include any references to these Figures.
  - c. The August 4, 1999 submittal stated that Drawing B-12A was to be inserted after B-12. There is no reference in the narrative to this new drawing B-12A which shows exterior building elevations. The drawing is titled "Exterior Elevations" and identified as A1.1,



not B-12A. There are no drawings identified as B.7 through B.12. It is not clear why this new drawing was provided or identified as B-12A.

8. The narrative (and drawings) need to show/describe the flow of waste from the time a truck arrives at the site until the waste leaves the storage area. Figure B.6 indicates the existing overhead door between Fluorecycle and the existing building will remain locked. Therefore, it is not clear how wastes enter the Fluorecycle facility.
9. Comment 7.d required the narrative to be revised to address all information required on the topographic map. The response states that the topographic map has been updated as requested. No revision to the narrative in Section B-2, was provided.
10. Comment 7.e questioned the validity of wind rose data from O'Hare Airport because there are several local airports closer to the site than O'Hare airport. The response states that O'Hare Airport is the closest representative reporting station for wind direction. The narrative should be revised to include the statement in the response to comments as well as justification for this claim.
11. Comment 8 required the application to describe how the operating record will be organized, include an example table of contents, and include copies of log sheets used for inspections, waste analyses, compliance monitoring, etc. However, only a table of contents was provided. Section B-5 needs to be revised to include the other information requested in the comment. In addition, the example table of contents should follow page B-5, not the figures at the end of Section B.

## **C Waste Characteristics**

12. The response to Comment 11 indicated that the percentages of the "standard" components in a lamp varied. First, if the percentage of a component varies, the range within which it varies still needs to be provided in the application. Second, if there are "nonstandard" components in a waste, they must also be identified. Finally, this information needs to be provided for each waste (both hazardous and nonhazardous) that the facility proposes to manage under the RCRA permit.
13. Other than repeating the wording in Comments 12.a and 12.b on page C-3, the waste analysis plan (WAP) was not revised to address Comment 12. For example, the response to comment 12.c states that containers will be inspected, weighed and evaluated, but the application does not include a specific description of how this will be done. Therefore, the comment is repeated below with additional wording to reflect the proposal to receive wastes other than hazardous fluorescent lamps such as nonhazardous incandescent light bulbs.

The portions of the WAP that describe the parameters and rational, sampling and test methods, and frequency of analysis all need to be significantly revised to describe the waste receipt and acceptance procedures:

- a. The WAP needs to indicate how fluorescent light bulbs, HID lamps and incandescent bulbs that are received intact will be addressed separately from containers of crushed fluorescent light bulbs and lamps.
  - b. Each container of intact fluorescent light bulbs or HID lamps needs to be visually inspected. The application needs to specify the parameters for which each container will be inspected, how, and where this will occur.
  - c. Each container of crushed lamps needs to be inspected to determine if it contains wastes which are not permitted at the facility. The application needs to specify the parameters for which each container will be inspected, how, and where this will occur.
14. Comment 14 stated Section C-2e, Additional Requirements for Wastes Generated Off-Site, and all of the subsequent subsections needed to be included as part of the WAP in the permit application. The application was not revised to address comment 14. Please refer to comment 14 in the April 2, 1999 IEPA letter for all of the specific subsections which need to be added to the application. It is recommended Fluorecycle discuss the wording it plans to incorporate into Section C-2e with IEPA prior to submitting the revised pages to the permit application.

## **D Process Description**

15. No pages in Section D of the application were revised in response to Comments 15 through 24. Fluorecycle needs to evaluate all responses to the April 2, 1999 comments and determine where to incorporate them in the permit application.
16. The application needs to include procedures which specify that only intact lamps (light bulbs) will be placed in the portions of the storage area which do not have secondary containment. Conversely, since wastes received in drums will not be tested for free liquids, the application must also include procedures to insure all wastes other than intact light bulbs will be placed an area or device which meets the secondary containment requirements of 35 IAC 724.275.
17. Figure B.2 identifies an area as having a secondary containment volume of approximately 700 gallons. During the 2-10-00 conference call, Fluorecycle stated the capacity of this area

is based on using plastic pallets which each have built-in secondary containment capacity. The application needs to include detailed scale drawings of these pallets which identify the dimensions of each pallet and calculations of their secondary containment capacity. Any volume displaced by drums into the secondary containment system will need to be subtracted from the pallet's gross capacity.

18. The response to Comment 16 did not address the comment. Therefore, the comment is repeated.

Because of the variety of containers that may be used at the facility, the application needs to include calculations which relate the maximum number of light bulbs to the maximum number of containers proposed for storage. Identify the maximum number of containers and light bulbs that will be placed on the storage racks, and the maximum number of containers and light bulbs placed in 55 gallon drums.

19. The narrative and drawings in the application need to describe the arrangement of both the maximum number of containers and the maximum number of lamps which will be in storage at any one time.
20. The response to Comment 18 did not address the comment. Therefore, the comment is repeated.

Elevation view(s) of the storage racks need to be provided. This scale drawing needs to show how individual containers will be arranged on the racks.

21. Section D-1b(3) states specialty steel containers will be placed directly on the floor. Figure B.2 only shows the locations of the storage racks. Figure B.2 needs to be revised to show the storage arrangement of these specialty steel containers.
22. The application needs to be revised to incorporate the response to Comment 20. In addition, all places where wastes are removed from, or added to, containers must be clearly indicated on a scale drawing.
23. The application needs to be revised to incorporate the response to Comment 21. In addition, the application needs to describe how the containers are stabilized (e.g. strapped together) prior to transport.
24. The application needs to be revised to incorporate the response to comments 22 and 23.

25. The response to comment 24 refers to the architectural floor plan drawing with the engineering floor load design information. However, a drawing titled "Architectural Floor Plan" is not part of the application and floor load design information is not provided on Figure B.2 which is titled "Floor Plan." Therefore, the application (narrative and drawings) need to be revised to demonstrate the floor of the building is strong enough to hold the weight of the containers in storage and the equipment used to move containers (e.g. forklifts) without cracking.

## **F Procedures to Prevent Hazards**

26. The response to Comment 26 stated the site was inspected by the local fire protection district and has adequate fire protection. However, this statement by itself is not adequate. The application needs to include documentation that the local fire protection district has determined the site has adequate fire protection. In addition, Section F-3a(4) of the application was not revised to incorporate the response to Comment 26.
27. The application was not revised to incorporate the response to comment 28. Section F-4a needs to describe how small containers are secured prior to transport within the facility.
28. F-4a Unloading Operations: During the 2-10-00 conference call, Fluorecycle discussed the unloading operations at the shared dock at the site. This section of the application needs to describe the operations at the shared dock area. Secondly, Fluorecycle stated that containers of waste were sometimes received at the small door at the northeast corner of the building. This section of the application needs to identify all locations where wastes are loaded or unloaded from vehicles and the procedures followed at each location.

## **G Contingency Plan**

29. Page G-3 was revised to define a mercury spill as a release of recovered mercury or breakage of more than 120 units at any one time. The application needs to define the term "unit."
30. The Contingency Plan (and emergency responses) should be implemented anytime there is an incident (spill, fire, release) involving hazardous waste, even a small one, not just incidents that have an off-site impact. The application needs to be revised to address this issue. Also, the application needs to include justification for the size of a release (e.g. the amount of mercury) which would trigger implementation of the Contingency Plan. For example, the application needs to identify the amount of mercury in 120 units and indicate if this is the amount which could threaten human health or the environment (either on-site or off-site).

31. The responses to the items in Comment 31 refer to the response to Comment 29, which simply states a "stand alone" Contingency Plan is submitted addressing all of the Section G issues. The revised pages G-1 and G-3, and the new pages G-11 and G-12 do not address the issues cited in Comment 31. Therefore, Comment 31 is repeated below.

The contingency plan must demonstrate that the following information was considered, at a minimum, in the development of the plan.

- a. type, amount, and variety of waste in the unit(s).
- b. location of waste.
- c. waste handling practices.
- d. possible hazards that may result from a release, fire, or explosion (e.g., the effects of any toxic, irritating or asphyxiating gases that are generated, or the effects of any hazardous surface water run-off from water or chemical agents used to control fire and heat-induced explosions). This requires an estimation of the types and quantities of gases that may be generated.
- e. the effects of weather conditions in the event of a release, fire, or explosion.
- f. identify the possible hazards to human health or the environment (on-site and off-site) that may result from a release, fire, or explosion.
- g. describe how the emergency coordinator (EC) will determine if a release, fire or explosion could threaten human health or the environment outside the facility. Identify the type of information and criteria the EC would use in arriving at such a determination. In addition, estimate the time it would take to make such a determination and compare that to the time it would take material resulting from a release, fire or explosion to travel off-site.
- h. how will the EC determine if evacuation of local areas may be advisable? As in g. above, identify the type of information and criteria the EC will use and make a time comparison of the time necessary to make such a determination to the time an off-site impact is estimated to occur.
- i. who will the EC notify if evacuation of the local areas is determined to be advisable?

An evaluation of this information may necessitate a change in the design or operation of the facility pursuant to 35 IAC 724.131.

32. Comment 32 stated it is not acceptable to use the term “significant” as a trigger for implementing the emergency response procedures. However, the wording in Section G-4 was not revised to address this comment.
33. The wording in Section G-4 was not revised to address Comment 34. Therefore, it is repeated.

The procedures and methodology followed when checking the mercury vapor level with a direct reading mercury analyzer need to be provided with the Contingency Plan. Describe how the procedures are customized/specific to a broken light bulb, a spill or fire.

34. The wording in Section G-4 was not revised to address Comment 35. Therefore, it is repeated.

The application needs to discuss the hazards from dermal contact with mercury. Identify the OSHA standard for dermal contact with mercury and relate this to the amount of mercury in the light bulbs. Describe how the contingency plan assesses the hazards from dermal contact with mercury (Section G-4).

35. The wording in Section G-4 was not revised to address Comment 36. Therefore, it is repeated (and revised for clarity).

Sections G-4d and G-4i refer to procedures or items “as described above” or “as defined above.” This wording is not acceptable. References to other parts of the plan must specify the particular subsection that is referenced. This comment also applies to any other part of the application which contains nonspecific cross referencing.

36. The response to Comment 38 and the additional pages (inspection report and letter from Village of Fox Lake) added to the application are acceptable. However, the application was not revised to include the response or reference the additional pages.
37. G-5 Emergency Equipment: Figure B.6 (also identified as Site Plan, C1.1) was provided. However, it does not identify the locations of hazardous waste, or the locations of all emergency equipment. All of the emergency equipment referenced in the emergency response procedures in Section G-4 and Table G-2 need to be identified on this scale drawing. An updated, and renamed, version of Figure B.2 may be better suited show all points of access/egress, the location(s) of hazardous waste, the locations of all emergency equipment, and the designated evacuation assembly point.

38. Table G-2 indicates only one respirator is available. However, the emergency response procedures in Section G-4 indicate respirators will be provided to personnel if necessary. Respirators should be available to all employees, and other personnel who could respond to an incident. The Contingency Plan needs to clearly and consistently indicate the pieces of emergency equipment available at the facility.

### **Personnel Training**

39. The wording in Section H-1c was not revised as requested in Comment 42 to demonstrate the training director has been trained in hazardous waste management. Therefore, the comment is repeated.

H-1c; Training Director: Demonstrate that the program is directed by a person trained in hazardous waste management. The application needs to specifically state that the Training Director will be trained in the hazardous waste regulations.

40. The wording in Section H-1d was not revised as requested in Comment 43. Therefore, the comment is repeated.

Section H-1d states “the minimum training requirements are specified above.” This wording needs to be revised to clearly identify the minimum training requirements.

### **Closure**

41. I-1c; Maximum Waste Inventory: The wording in Section I-1c of the application was not revised to identify the maximum number of containers and light bulbs that will be placed on the storage racks, and the maximum number of containers and light bulbs placed in 55 gallon drums. This description must indicate if the maximum waste inventory is comprised of whole light bulbs in containers, all crushed bulbs in 55 gallon drums, or a combination of the two.
42. I-1f Schedule for Closure: A schedule for closure that includes the total time to close each hazardous waste management unit and the time required for intervening closure activities, which will allow tracking of the progress of closure was not provided.
43. I-4 Closure Cost Estimate: A revised closure cost estimate was not provided. The cost estimate cannot be based on processing the inventory at the facility. It must be based on third party costs of removing the maximum waste inventory identified in Section I-1c and processing it off-site.

### **Financial Assurance**

44. A copy of a Performance Bond was provided with instructions to insert it at the end of Appendix 1. However, the narrative in the application (Section I-5) does not include any reference to this document. In addition, it is not clear why it should be inserted in an Appendix with contains documents pertaining to local siting approval.
45. Copies of financial documents were provided behind a page labeled "Insertion Pages." Neither the response to comments nor the narrative in the application specifically refers to these documents or where they should be inserted into the application.

JLM:WRW:bjh\2983S.WPD



FILE



## ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276

THOMAS V. SKINNER, DIRECTOR

217/524-3300

April 2, 1999

CERTIFIED MAIL  
P 344 335 343

Mr. Robert Woods  
Fluorecycle, Inc.  
27780 West Concrete Drive, Unit A  
Ingleside, Illinois 60041

*New Facility (1<sup>st</sup> time permit)*

Re: 0974455001 -- Lake County  
Fluorecycle  
ILR 000 049 833  
Log No: B-168  
Administrative Record File

Dear Mr. Woods:

The Illinois Environmental Protection Agency has reviewed the RCRA Part B permit application for the hazardous waste container storage area (S01) dated February 22, 1999 and received March 5, 1999 for the above-referenced facility. A list of comments on the application identified during this first Completeness/Technical review is included in the attachment to this letter.

Each of the comments must be addressed before the Illinois EPA can complete the review of your permit application. Your response must be submitted in quadruplicate and postmarked no later than June 7, 1999. The response should be in a format which allows incorporation of the new information into the appropriate sections of your application. To allow for a proper review of this new information, the location of the response to each deficiency should be identified in a list cross-referencing these items. Each revised page or drawing must have the revision date identified on them for tracking purposes.

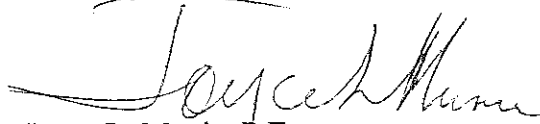
A certification identical to that outlined in 35 Ill. Adm. Code 702.126 must accompany your submission. The original and three copies of the new information and certification should be submitted to the following address:

Illinois Environmental Protection Agency  
Bureau of Land -- #33  
Permit Section  
1021 North Grand Avenue East  
Post Office Box 19276  
Springfield, Illinois 62794-9276

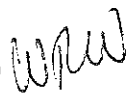
Page 2


If you have any questions regarding this subject, feel free to contact Rob Watson, P.E. of my staff at 217/524-3265.

Sincerely,



Joyce L. Munie, P.E.  
Manager, Permit Section  
Bureau of Land

JLM:WRW:bjh\992754S.WPD 

Enclosures 

cc: Hak Cho, USEPA Region V ✓  
Greg Gibbons, P.E.

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**1st Completeness & Technical Review**

**Comments**

**Section A**

**A.1 Forms and Permits**

**A.1.1 RCRA Part A Application:**

1. There are two owner signatures, but no one has signed as the operator on the Part A. Both the owner of the property and the operator of the facility must sign the Part A.
2. Section XIV (page 6 of 7) of the Part A must include the hazardous waste number D009. In addition, "Lamps" may not be an acceptable unit of measure (need lb., kg., gal., etc.)

**A.1.2 Permits or Construction Approvals: 702.123**

3. The RCRA permit application must include a list of all permits or construction approvals received or applied for under any of the following programs: RCRA, UIC program under SDWA and 35 Ill. Adm. Code 704, NPDES program under the CWA and 35 Ill. Adm.. Code 309, PSD program under the CAA, Nonattainment program under the CAA, NESHAPS preconstruction approval under the CAA, open dumping permits under the MPRSA, dredge or fill permits under Section 404 of the CWA, other relevant environmental permits including Illinois permits.

**A.2 Certifications**

**A.2.2 Facility Certification:**

4. Both the owner and operator must sign the facility certification.

**A.3 Confidentiality Claims:**

5. The application needs to include the appropriate claims and justifications if the application includes any trade secret, confidential data, or privileged information. Otherwise, if no information in the application is claimed confidential, the applicant must clearly state this in the cover letter of the application and each revision. **[Any documents submitted with the application that are not properly marked and justified will not be regarded as confidential and will be released to the public upon request.]**

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**A.4 Public Participation**

6. The application needs to include documentation that all of the applicable public participation requirements have been met.

**B General Facility Description**

**B-2a: Topographic Map Requirements**

7. The following information needs to be provided:
  - a. Section B-1.2 indicates the facility is in an addition to the PES building but is leased from the MGDSF partnership. The application needs to include written legal descriptions of the property owned by MGDSF Partnership and the parcel leased from MGDSF where Fluorecycle is located. Both of these property boundaries need to be shown in Figure B.6,
  - b. Written description of access controls at the facility, and shown on Fig. B.6,
  - c. Full size drawing of Fig. B.2,
  - d. All information required on the topographic map must be addressed in the application. This means that even if it does not exist at the site (e.g. no injection wells are present), the narrative in the application must include a statement to this effect. The specific items which are not considered complete or technically adequate are identified in the Table at the end of these comments.
  - e. Wind rose data from local airports if it is available. The prevailing wind direction at O'Hare may not be representative of Lakemoor.

**Format of Operating Record:**

8. Describe how the operating record will be organized and include an example table of contents. Include copies of log sheets used for inspections, waste analyses, compliance monitoring, etc.

**Contents of Operating Record:**

9. The application needs to be revised to indicate the following information about the facility described in 724.173 will be recorded in the operating record as it becomes available:

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- a. a description and the quantity of each hazardous waste managed,
- b. the location and quantity of each hazardous waste managed or disposed,
- c. the results of waste analyses and waste determinations,
- d. reports and details of all incidents where the Contingency Plan was implemented,
- e. records of inspections,
- f. monitoring, testing, or analytical data and corrective action data where required,
- g. for off-site facilities, notices to generators per 724.112(b),
- h. all closure and post-closure cost estimates,
- i. annual certification, by permittee, that the permittee has a program in place to reduce the volume and toxicity of hazardous waste generated,
- j. records of each shipment of hazardous waste placed in a land disposal unit under an extension of the effective dates of the LDRs, and
- k. copy of the notice (on-site facilities only need the information in the notice) and the certification, and demonstration required of the generator by 728.107 or 728.108.

**C Waste Characteristics**

10. These requirements applies to all wastes; solids, liquids, and gases managed in a RCRA regulated unit at the facility. These requirements also apply to nonhazardous wastes if they are managed in a RCRA regulated unit. **If the facility wishes to place any wastes other than fluorescent light bulbs or HID lamps in the container storage area**, these wastes must be identified in this permit application.

**C.1 Chemical and Physical Analysis**

11. Although detailed chemical and physical analyses of fluorescent light bulbs and HID lamps are not required, the application must still include the following basic information about fluorescent light bulbs and HID lamps:
- a. The components in each of these wastes, and the percentages at which they are present, and
  - b. The total and TCLP concentrations of mercury in each of the wastes.

**C.2 Waste Analysis Plan: 703.183(c), 724.113(b) and (c)**

12. The portions of the WAP that describe the parameters and rational, sampling and test methods, and frequency of analysis needs to be revised to include the following waste receipt and acceptance procedures:

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- a. Fluorescent light bulbs and HID lamps that are intact needs to be addressed separately from containers of crushed fluorescent light bulbs and lamps.
  - b. Containers of intact fluorescent light bulbs or HID lamps need to be visually inspected.
  - c. Containers of crushed fluorescent light bulbs and HID lamps need to be inspected and if necessary analyzed for the following:
    - i. Wastes other than crushed fluorescent light bulbs that the facility is not permitted to receive such as ballasts or residual waste contamination in the container.
    - ii. Free liquids. For owners and operators that store containers of wastes without a secondary containment system, the application must include the test procedures and results, or other documentation or information, which show that the wastes placed in these units do not contain free liquids as determined by the Paint Filter Liquids Test, Method 9095, in USEPA's publication SW-846 "Test Methods for Evaluating Solid Waste" (3rd edition and most recent finalized updates).
13. The application needs to describe the procedures followed if wastes other than light bulbs or free liquids are observed in the drummed waste as it is being added to the crusher.
14. Section C-2e, Additional Requirements for Wastes Generated Off-Site, needs to be included as part of the permit application. The following items must be addressed:
- a. Generator Information: Describe the procedures used to verify the sources of information provided from off-site generators.
  - b. Pre-acceptance Procedures: Describe the preacceptance procedures used to determine if the facility can receive a particular waste from off-site.
    - i. Identify regulatory (permit) limitations and operational limitations on the types of wastes which can not be received at the facility.
    - ii. Identify the information required from off-site generators.
    - iii. Identify the preacceptance analytical parameters used to identify and classify the wastes.
  - c. Waste Receipt Procedures: Procedures must be specified which will be used to inspect and, if necessary, analyze each of the hazardous wastes received at the facility to ensure

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that it matches the identity of the wastes designated on the accompanying manifest or shipping papers. Describe the different procedures followed for bulk (roll off boxes, tank trucks) and containerized (drummed) wastes.

- i. Describe the statistical method used to determine a representative sample of the incoming wastes (e.g. the number of drums to be sampled).
  - ii. Describe the waste receipt inspection procedures.
  - iii. Identify the fingerprint analysis parameters used to verify the waste is consistent with the preacceptance analysis.
  - iv. Identify the fingerprint parameters, or concentrations, which will trigger additional analyses and/or informational requirements from the generator.
  - v. Include a copy of the form(s) used to track wastes received from off-site (e.g. a Waste Receipt Analysis Report similar to Table 4-20 in the USEPA WAP guidance EPA/530-SW-84-012).
- d. Waste Acceptance Criteria: Describe the criteria used to determine whether to accept the waste. This determination should be based on the preacceptance information and results, and the data generated when the waste is received at the facility.
- e. Waste Rejection: Describe the criteria that determines if a waste is not in conformance with the requirements of the WAP and the procedures followed to reject a waste.
- f. Movement of Wastes: Describe the procedures used to determine the identity and movement of wastes managed at the facility.

**D Process Description**

15. The wastes crushed off-site, the application must include the test procedures and results, or other documentation or information, which show that the wastes placed in the container storage area do not contain free liquids as determined by the Paint Filter Liquids Test, Method 9095, in USEPA's publication SW-846 "Test Methods for Evaluating Solid Waste" (3rd edition and most recent finalized updates).
16. Because of the variety of containers that may be used at the facility, the application needs to include calculations which relate the maximum number of light bulbs to the maximum number of containers proposed for storage. Identify the maximum number of containers and

**Fluorecycle: B-168**  
**1st Completeness & Technical Review**

light bulbs that will be placed on the storage racks, and the maximum number of containers and light bulbs placed in 55 gallon drums.

17. A full size scale drawing of the facility which shows the arrangement of the maximum number of storage containers needs to be provided. It is important to note that storage of containers in a manner different than that approved in a RCRA permit would be a violation of the permit.
18. Elevation view(s) of the storage racks need to be provided. This scale drawing needs to show how individual containers will be arranged on the racks.
19. The proposed arrangement of the 55 gallon drums is not adequate because it does not allow for the individual inspection of each drum. A revised arrangement needs to be shown on a scale drawing of the area. Also, indicate the aisle space maintained between rows of containers. The minimum recommended aisle spacing is 2.5 feet. An aisle must be wide enough for the owner/operator to remove a drum from storage if it is leaking. If a smaller aisle space is proposed, the application needs to show that the aisle is large enough for inspections and that emergency response equipment can be used in the aisle space.
20. Describe the tools and procedures used to open/close containers and any equipment used to add or remove wastes from containers. All places where wastes are removed from, or added to, containers must be clearly indicated on a scale drawing.
21. Describe the equipment and procedures used to transport containers within the facility. If more than one container is moved at a time, describe how the containers are stabilized (e.g. strapped together) prior to transport.
22. It is not acceptable to store 55 gallon drums 4 high. The maximum recommended stacking height is 6.5 feet (two 55 gallon containers high). Containers stored above this height, are not easily inspected. In addition, the higher a container is stored, the more likely it is to rupture if it falls to the floor.
23. Describe how small containers (<10 gallons) will be stabilized (strapped together) when in storage.
24. Provide an engineering evaluation of the base's structural integrity which demonstrates the base is strong enough to hold the weight of the containers and the equipment used to move containers (e.g. forklifts) without cracking.



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**F    Procedures to Prevent Hazards**

25. The application needs to identify the access points at the facility and shown them on the scale drawings Fig. B.2 and B.6.
26. F-3a(4) Water for Fire Control: Demonstrate that the facility has water at adequate volume and pressure to supply water hose streams, foam producing equipment, automatic sprinklers, or water spray systems. Alternately, demonstrate that two fire extinguishers meet the local building codes, NFPA, and insurance requirements.
27. The proposed aisle spacing for 55 gallon containers is not adequate. Refer to earlier comments on container storage.
28. F-4a Unloading Operations: Describe how small containers are secured prior to transport within the facility. Refer to container storage comments.

**G    Contingency Plan**

29. Page G-1 refers to Fig. B.6 as the Site Plan. The Contingency Plan can not reference other documents or parts of the application. It must be a stand alone document because it is distributed to local hospitals and local emergency response agencies. The Contingency Plan needs to include scale drawings of the facility that identify the following, at a minimum: points of access/egress, the location(s) of hazardous waste, the locations of all emergency equipment, and the designated evacuation assembly point.
30. G-3 Contingency Plan Implementation: The plan needs to include a more detailed description of the types of incidents which would result in implementation of the plan. It needs to identify (1) the types of releases and (2) the amount of mercury in a release that could threaten human health or the environment. In general, the plan (and emergency responses) should be implemented anytime there is an incident (spill, fire, release) involving hazardous waste; even a small one. However, notification of police, fire dept., Illinois EPA, etc. should only occur if the release could threaten human health or the environment.
31. The contingency plan must demonstrate that the following information was considered, at a minimum, in the development of the plan.
  - a. type, amount, and variety of waste in the unit(s).
  - b. location of waste.

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- c. waste handling practices.
- d. possible hazards that may result from a release, fire, or explosion (e.g., the effects of any toxic, irritating or asphyxiating gases that are generated, or the effects of any hazardous surface water run-off from water or chemical agents used to control fire and heat-induced explosions). This requires an estimation of the types and quantities of gases that may be generated.
- e. the effects of weather conditions in the event of a release, fire, or explosion.
- f. identify the possible hazards to human health or the environment (on-site and off-site) that may result from a release, fire, or explosion.
- g. describe how the emergency coordinator (EC) will determine if a release, fire or explosion could threaten human health or the environment outside the facility. Identify the type of information and criteria the EC would use in arriving at such a determination. In addition, estimate the time it would take to make such a determination and compare that to the time it would take material resulting from a release, fire or explosion to travel off-site.
- h. how will the EC determine if evacuation of local areas may be advisable? As in g. above, identify the type of information and criteria the EC will use and make a time comparison of the time necessary to make such a determination to the time an off-site impact is estimated to occur.
- i. who will the EC notify if evacuation of the local areas is determined to be advisable?

An evaluation of this information may necessitate a change in the design or operation of the facility pursuant to 35 IAC 724.131.

- 32. G-4 Emergency Response Procedures: This section states that these procedures will be implemented "if a significant release occurs." It is not acceptable to use the term "significant" as a trigger for implementing the emergency response procedures. The Contingency Plan needs to clearly identify the situations which will result in implementation of emergency response procedures and/or the Contingency Plan.
- 33. G-4 Emergency Response Procedures: The plan needs to identify the specific procedures followed in response to a fire and those for cleaning up broken light bulbs or a spill.

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34. The procedures and methodology followed when checking the mercury vapor level with a direct reading mercury analyzer need to be provided with the Contingency Plan. Describe how the procedures are customized/specific to a broken light bulb, a spill or fire.
  35. The application needs to discuss the hazards from dermal contact with mercury. Identify the OSHA standard for dermal contact with mercury and relate this to the amount of mercury in the light bulbs. Describe how the contingency plan assesses the hazards from dermal contact with mercury (Section G-4).
  36. Several sections in the Contingency Plan refer to procedures or items "as described above" or "as defined above." This wording is not acceptable. References to other parts of the plan must specify the particular subsection that is referenced. This comment also applies to any other part of the application which contains nonspecific cross referencing.
  37. G-4c: Assessment: This section needs to include air modeling that predicts the possible hazards that might result from a release, fire or explosion. Guidance on the development of contingency plans is included at the end of these comments.
  38. G-4e Prevention of Recurrence or Spread of Fires, Explosions, or Releases: If most of the lamps storage containers are constructed of cardboard, the Illinois EPA is concerned that two fire extinguishers may not be adequate to contain a fire. See earlier comment on Section F-3a(4).
  39. G-5 Emergency Equipment: The locations of all emergency equipment need to be indicated on a scale drawing of the facility.
- G-6 Coordination Agreement Requirements:** 724.137, 724.152(c), 724.153(b)  
The application states that they will hold a coordination meeting, plant tour, and provide copies of the Contingency Plan to local police and fire departments, hospitals, to familiarize them with the facility and actions needed in case of emergency.
40. G-7 Evacuation Plan: The designated assembly point referenced in item 3 needs to be identified on a scale drawing of the facility. The application needs to discuss the selection of this location relative to the prevailing wind direction. The assembly point should be either across, or up-wind, from the facility. Note: information obtained from the local airports may be more accurate for Lakemoor than the wind rose from O'Hare Airport.

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**Personnel Training**

41. H-1b: Training Content, Frequency and Techniques: Employee training needs to include the RCRA hazardous waste regulations. The application needs to specifically state that training will include the regulations.
42. H-1c: Training Director: Demonstrate that the program is directed by a person trained in hazardous waste management. The application needs to specifically state that the Training Director will be trained in the hazardous waste regulations.
43. H-1d: Relevance of Training to Job Position: This section states "the minimum training requirements are specified above." This wording needs to be revised to clearly identify the minimum training requirements.

**Closure**

44. I-1c: Maximum Waste Inventory: This section needs to be revised to identify the maximum number of containers and light bulbs that will be placed on the storage racks, and the maximum number of containers and light bulbs placed in 55 gallon drums.
45. I-1f Schedule for Closure: Provide a schedule for closure that includes the total time to close each hazardous waste management unit and the time required for intervening closure activities, which will allow tracking of the progress of closure.
46. I-4 Closure Cost Estimate: This section states the estimate includes processing the remaining inventory. The cost estimate cannot be based on processing the inventory at the facility. It must be based on third party costs of removing the inventory and processing it off-site.
47. I-5: Financial Assurance Mechanism for Closure: The application must specify a financial assurance mechanism for facility closure. The mechanism must be one of the those specified in 35 IAC Part 724 and described in the RCRA Decision Guide. The financial assurance mechanism must be on an Illinois EPA form.
48. I-8: Liability Requirements: The application needs to include an insurance policy amended by "attachment of the Hazardous Waste Facility Liability Endorsement or evidenced by a Certificate of Liability Insurance." As specified in Section 724.251, these must be on our forms. A blank copy of the form and instructions is attached to this letter.

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49. Pursuant to Section 724.247 and 724.243, evidence of both the liability insurance and their mechanism of Financial Assurance must be received by the Illinois EPA 60 days prior to accepting waste.

**Continuing Releases at Permitted Facilities**

50. This section refers to Appendix 6 for a letter from the property owner that there are no SWMUs on the property. The correct reference is Appendix 7.

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**MAP REQUIREMENTS  
FOR 1000 FEET AROUND THE SITE**

REQUIREMENT	LOCATION IN APPLICATION	COMPLETE	TECHNICALLY ADEQUATE
Map Date		Y	Y
Scale		Y	Y
Orientation		Y	Y
2' Contours	Fig. B.3	Y	Y
100 yr. floodplain	Appendix 3	Y	Y
Surface Waters	Fig. B.3	Y	Y
Surrounding land uses	Fig. B-3, B.5	Y	Y
Wind rose	Fig. B.4	Y	Y
Legal Boundaries	Fig. B.6	Y	N
Access Control	Fig. B.6	Y	N
Injection Wells		N	N
Withdrawal Wells	Fig. B.1	Y	Y
Buildings, Structures	Fig. B.5, B.6	Y	Y
Sewers: process/storm	Fig. B.6	Y	Y
Loading/Unloading Areas	Fig. B.6	Y	Y
Fire Control		N	N
Flood Control & Drainage	Appendix 3	Y	Y
Run-on/Run-off Controls	NA	Y	Y
New Haz. Waste Units	Fig. B.2	Y	Y
Existing Haz. Waste Units		N	N
Solid Waste Units		N	N

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